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The Artist as Researcher:
A Narrative Case Study of Lead Pencil Studio

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The Artist as Researcher:
A Narrative Case Study of Lead Pencil Studio

by

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Thesis

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Dedication

To my first editor and life-long teacher,

my dad.

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Abstract

The Artist as Researcher:
A Narrative Case Study of Lead Pencil Studio

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This thesis is a narrative case study that examined the studio art practice of Lead Pencil Studio, a Seattle-based artist collaborative that explore our spatial relationships with architecture through site-specific installations. The case study specifically focused on the work of Daniel Mihalyo and Annie Han (Lead Pencil Studio) while they were at the Visual Arts Center in The University of Texas at Austin for a spring 2013 artist-in-residence program.

The research focused specifically on the artists' day-to-day process, examining the thoughts and actions that went into creating their work, *Diffuse Reflection Lab,* a two-story plywood structure that examined reflection's effect on architecture through various vignettes. Through concentrated observations of the Lead Pencil Studio's work and three semi-structured interviews, this thesis examined how traditional research practices are integrated into the studio art process. By examining the art/research relationship the author also situates this work in the field of practice-based research.

While this work specifically focused on the research conducted by a pair of professional artists, it also extends to a broader argument about the role of research in art lessons. Since this thesis is based in art education, it connects the themes observed in the artists' studio practice to interdisciplinary learning and arts integration. The author ultimately argues that Lead Pencil Studio's art/research practice can be used in the classroom as an example of transdisciplinary learning and that it models a rigorous approach to creativity within other disciplines.

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CHAPTER 1: INTRODUCTION

Introduction to the Study

Throughout my research I have been trying to make sense of the somewhat disparate relationship between creativity and research. These terms are not new to me, although they have always felt separate. When I was in high school, creativity felt synonymous with art making, a context in which I felt free to imagine and create. Later in college, while creative thinking was valued, I sensed that research was more respected. As an art major, I oftentimes resented the culture of academia because the research paper was considered to be more academically prestigious than a work of art, even though it required a comparable amount of thought and labor. So when I first learned about practice-based research I was excited because I felt like a connection between creativity and research had finally been revealed. Practice-based research looks to an artist's studio practice and seeks to show how research and academic questions can inform the artist's work and vice versa. I had finally found a theory that identified a positive relationship between artistic creativity and academic research, but I wanted to know more about the day-to-day logistics in an artist's studio, since that was where my own understanding began.

The relationship between research and creativity first became apparent to me in college while I was working on my honors art thesis. Prior to my thesis, I had internalized a feeling of inferiority, believing that visual art could not have an impact equal to academic writing. But as I began to formulate a central topic for my artwork, I realized that my studio practice required rigor and critical thinking, similar to a more traditional research project. Beyond my own practice, I looked around the painting studio and saw everyone's studio walls covered with photos and documents. We were all researching

color palettes, cross-referencing work from contemporary artists, observing social phenomena as shown in media clips, and using photography for reference in order to create possible compositions. For every artistic decision that was made, there was a stack full of research to inform us.

My own work examined the religious identity of twenty undergraduate women, who I interviewed and photographed. I then compared their stories to my background research, which involved listening to oral histories and studying the portrayal of women in religious and contemporary art. My work culminated in a final show that presented the stories through a series of photographs and paintings. In the end, I felt that my work had reached a broader audience while remaining true to my academic inquiry.

While I had experienced practice-based research in my own studio practice, I had never been articulated it as such. I knew it would be difficult to find an artist who viewed their studio practice as an example of practice-based research, but I hoped to observe someone and frame it as such in order to show how research implicitly and explicitly exists in the creative process. While some may assume that creativity is an unbounded, unrestricted action, I believe that an artist must have some structure, order and drive (as exemplified in research) in order for their creative process to succeed. My dilemma was how and where could I so intently observe an artist's work through the duration of a project?

As I struggled to find the right opportunity for my research, I continued with my schoolwork. On a weekday afternoon last spring, I decided to attend an artist talk presented by the Visual Arts Center (VAC), a gallery space at The University of Texas at Austin. The talk had been advertised amongst a clutter of flyers that always surround the entrance to our department's elevators, and my decision to attend was rather last minute. I paced back and forth through the second floor hallway of the Art building confused that

a lecture would take place in what appeared to be the sculpture studio. But after mustering the courage to enter the studio mid-lecture, I crept in and crouched down to sit awkwardly on the floor in the front of the room. Two artists sat casually in the back yet from my perspective they were entirely hidden by the rows of art students who had packed the space. For half an hour I sat craning my neck to see the projected images, completely enthralled by the artists' voices as they narrated the thoughts behind their process and artwork.

The artists I heard speak were Lead Pencil Studio, a married couple and collaborative comprised of Daniel Mihalyo and Annie Han. The Visual Arts Center had invited Daniel and Annie to create a site-specific work in its Vaulted Gallery for the spring of 2013, and the initial talk was meant to recruit student workers for their upcoming residency. Knowing that the artists would be on campus to create a project from beginning to end, I saw the perfect opportunity for my research and asked the artists to be the central focus of my thesis.

Lead Pencil Studio is unique in that Daniel and Annie were trained as architects, but they have taken that training and translated it to a studio art practice. Their work straddles architecture and art through what they call "spatial inquiry." Through their work, they ask audience to take a step back and look at their built surroundings more critically. The artists describe their large-scale installations as "useless architecture" because the structures are void of any utilitarian function and instead challenge our perception of space.

Their proposal for the Visual Arts Center focused specifically on reflection and the surfaces that we encounter on a daily basis, whether it is in a commercial or industrial setting. For over one month, from January through early February 2013, the artists were in Austin at the University working to complete their installation, *Diffuse Reflection Lab.*

As a researcher, I had the opportunity to look beyond my own studio practice and see how an established set of artists worked through the creative process and how they implemented research in a large-scale installation. No longer was practice-based research just a theory, but I was seeing art in action so I could finally resolve many of my own questions.

Central Research Question

How do artists integrate research into their art while working in each of the three stages of the studio art process? And how does each stage (planning, execution and presentation) incorporate interdisciplinary learning, if at all?

Problem Statement

When I began my research, I assumed that terms like arts-based research, arts-informed research, and practice-based research were synonymous. Upon further examination I found nuances in the terminology (Cahnmann-Taylor, 2008; Eisner, 2008; Sullivan, 2006). Both arts-based research and arts-informed research arise more commonly in higher education, where academics use art to *aid* their research. In practice-based research, the artist *is* the researcher. I am interested in better understanding practice-based research and making this methodology more accessible to academics and educators, who can learn from the artists' research. By examining the details within the artist's research process, I also hope this process can become better documented and therefore be more legitimized.

In order for practice-based research to become a more commonly acknowledged term, I believe that artists must also self-describe their work as research. By sharing my

research with artist-participants, I addressed the problem that practice-based research is more widely known amongst art educators but not professional artists.

Also, I believe that art educators have difficulty articulating the artistic process to their students and I believe my research will help demystify this process. By explaining practice-based research, art educators could also make their students' studio practice more research oriented and focused on rigor.

Research Methodology

My research methodology combines case study and narrative techniques. I chose case study as a way to study the "phenomenon" of practice-based research (Stake, 1998). My fieldwork was limited to a specific time and place, namely the artists' spring residency at The University of Texas at Austin. The specificity of my observations bounded my work specifically to the creation of *Diffuse Reflection Lab*, but as I further considered my methodology I realized that I also wanted to incorporate my interest in storytelling. This interest then directed me towards narrative inquiry. Narrative research methodology uses Deweyan theories that examine "personal and social," "past, present, and future," and "the notion of place" (Clandinin & Connelly, 2000, p. 50). All of these approaches engage in a personal inquiry, which I used throughout my investigation of Lead Pencil Studio.

My fieldwork mixed techniques from case study and narrative but also borrowed from ethnography. Ethnographic techniques were especially notable when I became more involved in the studio art process, at times taking part in the creation of *Diffuse Reflection Lab*. My observations relied on field notes, photography and voice recording, but I found that the majority of my data came from my three semi-structured interviews with Lead Pencil Studio.

I go into more detail about my research methodology in Chapter 3, but overall I believe that my mixed methodology enabled me to honestly explore the logistics of practice-based research. Through narrative, my investigation also balanced the artists' narrative with my own. By balancing the two narratives, I was able to describe Lead Pencil Studio's artistic research, while also providing an art educator's perspective.

Motivations for Research

Personal Motivations

My greatest motivation to study practice-based research comes from my identity struggle in art education. As a high school student I was proudly enrolled in a wide range of Advanced Placement (AP) courses. In my AP art course, the curriculum required me to display proficiency through my technical skills, but conceptually my interactions with art were superficial. Art was my favorite class, but I was frustrated with how others negatively viewed the class, perceiving it as non-intellectual. This insecurity crystallized my senior year of high school when in a scholarship interview a fellow candidate asked me about my classes. When I mentioned AP Art he abruptly responded, "That's not a real AP." That experience was not the first time a classmate or teacher downplayed my involvement in the arts, yet I continue to carry that comment with me.

Meanwhile, in my "real" AP courses, creative projects dominated the curriculum. I made mini documentaries for Government and Politics, drew book covers for English and constructed sculptural models for Environmental Science. My artistic skills set me apart from my peers, but my teachers never discussed why art was used in their curricula. I was utterly confused; when I was drawing in art class, it was considered easy, but when I was drawing for an academic project, it was considered intellectually valuable.

Another personal motivation that interested me in practice-based research was my experience at contemporary art museums. Growing up, I was fortunate to visit multiple Venice Biennales and observe the trends occurring in contemporary art. The most influential exhibit I ever saw at the Venice Biennale occurred in 2007 when Sophie Calle won best in show. Her show focused on one phrase, "take care of yourself," something Calle's ex-boyfriend had written to her in a breakup email. Calle's reaction was to have 107 women around the world respond to the letter, asking how she should take care of herself. Throughout the pavilion were letters, songs, and videos from women of all professional and cultural backgrounds. I remember my father comparing her work to a really well executed school project and in many ways I agreed. *Take Care of Yourself* was a research project and an art exhibit; Calle asked a question and used multiple resources to answer it. Yet, ultimately the space and the method of display transformed Calle's research into "Art." I actually went back a second day, sitting in the pavilion for hours so I could absorb all of the details within her work. I believe Calle's show is proof of how contemporary art has shifted towards an intellectual, research-oriented practice rather than being "art for art's sake."

In response to Calle's show and other work I have seen in major museums, I have come to realize that trends in contemporary art now understand and recognize the artist as researcher. The artist-researcher is no longer restricted to the studio; rather he or she is expected to be involved in a wide breadth of disciplines. As contemporary art stretches to address themes like race, gender, culture, psychology, politics and environmentalism, the artist must be knowledgeable in more than just aesthetics and technique. This demand upon the artist fascinated me and inspired me throughout my research.

Professional Motivations

As the art instructor at the North Carolina Governor's School, I have worked with other disciplines so that my art students can see how ideas are connected across disciplines. Oftentimes I work with teachers outside my discipline, telling them about artists whose works explore topics like sustainability, American politics, and psychology. I hope that my research will encourage teachers to see how an artist's research/work can complement their lessons.

As someone who wants to promote studio art as a rigorous subject, I am also committed to this research because I want to show my students how art can be intellectually and conceptually challenging. I want my students' practice to be informed by practice-based research and I want them to ask questions that place them outside the studio and into the world. By studying artists-researchers and then implementing practice-based research in the classroom I hope my future students can see how art integrates learning from varying disciplines and applies to real life issues.

Hypothesis

I believe that my research will show how artists conduct research in their studio practice, showing how each stage of the artistic process lends itself toward a different approach to practice-based research. Lead Pencil Studio researches architecture and urban spaces through multiple disciplinary lenses. I anticipate that their studio practice will provide an alternative, artistic perspective while maintaining research integrity. Also, I believe the artists' education and experience in architecture will provide insight into how art blends well with other disciplines, which further confirms art's beneficial role to interdisciplinary learning.

Limitations of the Study

By only observing one artist duo, I have limited the breadth of my research. Even though I limited the medium, the topics studied and the contextual frame of reference, I believe my work with Lead Pencil Studio to be more focused and thorough. If this research were to be expanded, I believe it would benefit from a more long-term study with a broader range of artists. Thus, I see my work as introductory or supplemental to a more in-depth investigation on practice-based research.

Also, due to my extended observations and my hands-on involvement with the artwork, I believe my observations and conclusion could be biased. As I straddled the line between researcher and collaborator, I have strived to uncover these biases and discuss them throughout my work.

Significance to the Field of Art Education

While doing my research I noticed a wide range of terminology used to describe arts-based research and interdisciplinary learning. While each term shows a nuance in practice and belief, I believe this multiple use of terminology fragments the movements and undermines their ability to bring change. In my research I hope to offer a clearer understanding of when and how these terms are used.

My research is also posited to support the claim that the artist is a researcher. This is an issue that higher education has debated when attempting to define the objectives and goals within a Masters of Fine Art. If my hypothesis is supported, I will contribute to the claims that artists' research is informative, academic research and that the terminal degree of the artist could extend to the Ph.D. I will further discuss the role of the Ph.D. in Chapter 6, when I consider how my thesis might inform future studies in the field.

Definition of Terms

In the following chapter I will uncover the complexity of the terms used in and around arts-based research and interdisciplinary learning. The purpose of this section is to identify terms that arise throughout the thesis and to explain how my own experiences and preferences affect their meaning. While some of my definitions align with authors in the field, many of my definitions simply come from personal experience.

Arts-based Research

Also known as "Arts-Based Educational Research (ABER)," Eisner and Barone believe that researchers in the humanities can use artistic practice as a means to expand their research. Common examples are ethnographic poetry or narrative storytelling, which are used to discuss educational reform (Cahnmann-Taylor & Seigesmund, 2008). For the purpose of this thesis I have chosen to use arts-based research as a broad, all-encompassing term that describes any art practice associated with research.

Practice-based Research

This term, coined by Graeme Sullivan, describes the contemporary artist as researcher. This term is also known as studio-based inquiry, as it focuses on the artist's studio practice to address major themes or societal questions. This term is also discussed in the debate over the MFA and whether artists in academia should be working towards a Ph.D. further supporting their claims as researchers (Sullivan, 2005; 2006). I use this term to describe Lead Pencil Studio's research, because it is the most common term that is used to describe the professional artist as researcher. I also used the term "art/research" interchangeably with practice-based research because I believe it provides for a more flexible interpretation,

showing how art and research are interacting differently throughout the artistic process.

Curriculum

Eisner defines curriculum as an "array of activities that give direction to and develop the cognitive capacities of individuals" (2002, p. 148). He describes a plan that is "designed to influence what students should learn" through "plans and materials" (Eisner, 2002, p. 149). My discussion of curriculum follows these guidelines and applies to K-12 schooling in the United States, although my own experience in education places me firmly in secondary curriculum.

Interdisciplinary Learning

This term is defined as "an approach to learning that seeks to develop and build student competence by consciously applying and utilizing the knowledge, skills, and methods of more than one discipline or subject matter to inquire about and explore an object, central theme, concept, topic, problem, issue or experience" (Boston, 1996, p. xi). It is also defined as a "curriculum approach that consciously applies methodology and language from more than one discipline to examine a central theme, issue, problem, topic, or experience" (Krug & Cohen-Evron, 2000, p. 264). I used interdisciplinary learning as an all-encompassing term for curriculum integration, although my research specifically examines the interaction of art with other disciplines.

Arts integration

As Thomas and Arnold assert in their article, "The A+ Schools: A New Look at Curriculum Integration," this term describes arts as the sole discipline that crosses disciplines in curriculum integration (2011). I believe this term more accurately aligns with how I use interdisciplinary learning, although arts integration tends to

be negatively received because it positions art as a tool for other disciplines, rather than giving it equal weight within the curriculum.

Creativity and Creative Process

This term reflects the notion that creativity is an action that produces novel and original work, an action arising from the person who can find novelty in ordinary experiences (Weisberg, 1993). The creative process is "not based on intuition alone, but can only exist when intuitive action is supported and complemented by reflective thinking" (Foque, 2010, p. 37). I believe that creativity extends beyond artistic practice to other disciplines as long as the creative person engages in intuitive thinking and reflection.

Process

I use this term to describe the thoughts and actions that drive forward an artist's studio practice (Sullivan, 2001). Process starts with observation and inspiration and extends to when the artist has completed his/her artwork. Art educators often discuss the dichotomy between process and product. My research aligns with more with process, as I focus on the actions and thoughts of the artists over the work itself.

Studio Art Practice

This thesis considers two types of studio art practice: the professional artist's practice and the student's practice in an art classroom. The professional artist's studio art practice is associated with an isolated space for the artistic "genius" (Jones, 1996). According to Sullivan (2006), the studio is a "site of knowledge" (p. 23). I believe the professional artist's studio practice extends beyond the individual genius, rather becoming a site of collaboration, exploration, research and production. The site also provides an opportunity for artists to communicate

and meditate. The studio art practice for students describes an art classroom that "promotes work-flow" (Hetland et al., 2007). In *Studio Thinking: The Real Benefits of Visual Arts Education,* the authors describe an established mood where students are "usually absorbed by handling (often messy and sometimes complex and even dangerous) materials and tools" (Hetland et al., 2007, p. 15).

Institution

I define the institution as a gallery, museum, university or other non-profit that has a space specifically designated for professional artists to feature their artwork. The institution serves as a platform for the artist to distribute their ideas to the public via their artwork. The institution also hosts artist talks, lectures and/or symposiums so that the community can learn from and interact with the artist. I believe the institution is also important in publicizing the artist's ideas and in distributing their work to others (this includes art historians, art critics, and other academics).

Collaboration vs. Collaborative

Collaboration describes two or more people of varying skill levels or backgrounds that work together toward a common goal. Collaboration can occur once or multiple times between the same groups of people, but more readily describes a group action for a specific project. Meanwhile, a collaborative describes two or more people, specifically in the visual arts, who identify as a group based on similar ideologies and/or common goals and work together or alongside one another for a more sustained, long-term period.

Site-Specific Artwork

The term reflects art works created to address the specific time, place, history, or environment of a space. The works are typically ephemeral and short-lived, yet

there are some permanent site-specific works that are used to commemorate or bring attention to a space. Typically the works are installations, but they can be digital, two-dimensional and/or multidisciplinary. In this thesis, Lead Pencil Studio's work, *Diffuse Reflection Lab* was a site-specific installation created specifically for the Visual Arts Center at The University of Texas at Austin.

Installations

This term refers to three-dimensional works of art that can be interactive, immersive, and/or site-specific. Installations are typically interior works, usually seen in museums or galleries. They rely on ordinary materials that we encounter on a daily basis, but through repetition and large-scale presentation the materials' mundane functions are transformed. Installations can also rely on digital sound and video work, either making technology the main component or using it as an aid to the three-dimensional work. The use of technology can cause installations to be more interactive, where the work changes in response to the viewer's interaction and manipulation.

Conclusion

This chapter established my thesis as a narrative case study that is investigating Lead Pencil Studio's art/research process while they work at The University of Texas at Austin. By establishing the work within the field of art education, I also consider how the artists' studio practice can affect curriculum and educational practices. In the following chapters I expand upon these ideas, starting with a review of the established literature and then moving on to describe my personal investigations and interpretations.

In Chapter 2, I provide background information on the already established field of art and research showing how authors have created various terms that describe the

art/research relationship. I also examine creativity, postmodernism and interdisciplinary learning as they relate to my main research question.

In Chapter 3, I define my research methodology, establishing the rules of practice that guided my fieldwork with Lead Pencil Studio. This chapter places my investigation within the field of narrative and case study, but also explains my personal decisions that made my investigation unique.

In Chapter 4, I provide context about the artists, using past works to demonstrate the major themes that define their art practice. This chapter also describes the work done on *Diffuse Reflection Lab,* which was the focus of my observations.

In Chapter 5, I analyze the data that I collected while working with Lead Pencil Studio on *Diffuse Reflection Lab*. My analysis is structured using the three stages of the art process (the planning stage, the execution stage, and the presentation stage) and it also highlights themes that further define the art/research process.

In Chapter 6, I interpret the data as it relates to the already established field of practice-based research. I also examine the art/research process, as it is associated with interdisciplinary learning and arts integration. In this final chapter, I conclude my study by pointing to loose ends in my research, suggesting future research for others to continue in art education.

In many ways my thesis makes a full circle. I start with the literature review, move into my own narrative and then return to the literature in order to analyze how my work relates. In the following chapter I begin my investigation by examining the current perspectives on practice-based research and interdisciplinary learning, while asking how my research fits in.

CHAPTER 2: LITERATURE REVIEW

Introduction

In my final semester of college, I enrolled in a history of curriculum course. Despite my previous coursework in education, I quickly realized that I was unaware of the people and theories that had informed my learning. Upon graduating I would be teaching abroad and I anxiously realized that the course was only making me feel unprepared. Each class my list of questions grew as I tried to compare history to my own experiences. Looking back I now see value in those questions, because they made me realize the possibilities that exist within curriculum. In that course, it became my goal to find an aspect of curriculum that I could latch on to and make my own. When I read about John Dewey and experience-based learning, I was thrilled by how much his ideas resonated with me. I came to realize how my most valued moments in education occurred in the art studio when I was focused on process and real-life questions. Without knowing it, Dewey had greatly impacted my education and I wanted to recreate that in my own teaching. So in my investigation of art, research and curriculum Dewey is a great force in determining my interests. While his primary literature only served as inspiration for my work, many of the cited readings use Dewey as a basis for their own artistic and educational theories.

For the following sections, I looked at my research question and identified the major terms and ideas, from which I created four categories: art and research, the studio art process, postmodernism, and interdisciplinary learning. Through my investigation I realized that these topics were interrelated, addressing common topics like creativity, collaboration, and the psychology of learning. So while I attempt to mark a separation between these topics, they all weave together to form a larger narrative.

Art and Research

Recently the National Academy of Science denounced arts-based methods as scientific-based research because it was considered a soft form of qualitative research (Cahnmann-Taylor, 2008; Eisner, 2008). Through my investigation of this methodology I hoped to reveal Lead Pencil Studio's art practice as a rigorous and valid type of research methodology. My research is not new to the field (Daichendt, 2012; Desai, Hamlin & Mattson, 2010; Leavy, 2009; Smith & Dean, 2009; Sullivan, 1996). While many researchers have conducted case studies on contemporary artists, I noticed that the studies do not provide enough detail about the day-to-day activities of the artists' studio practice. More than anything, the literature on arts-based research works toward establishing credibility and defining terms, which make case studies secondary, if they are included at all. In *Art Practice as Research: Inquiry in the Visual Arts*, Sullivan (2005) argues that if there were "sound theoretical principles" established and institutionalized by the arts field, than practice-based research could become more credible (Sullivan, 2005, p. xiii). Through case studies of the contemporary artist's studio practice, I believe we can better identify theoretical principles that bring together the disparate definitions and goals within arts-based research.

Knowing the confusion that surrounds this topic, I had to ask myself why investigate arts-based research at all? In *History as Art, Art as History*, Desai, Hamlin, and Mattson (2010) look at how researchers must address an increasingly broad range of perspectives and experiences. They state, "We no longer represent ideas, feelings, thoughts and experiences through oral and written means. Rather, multi-modal ways of representing human experiences are now commonplace" (Desai et al., 2010, p. 5). If researchers are to account for the various angles and perspectives from which topics are

examined, then artists can help address this multiplicity. Eisner (2008) describes arts-based research as "the result of artistically crafting the description of the situation so that it can be seen from another angle" (p. 22). While arts-based research offers an alternative approach toward research questions, there are still varying opinions on how this is accomplished. When looking at the multiple interpretations of arts-based research, I began to see a continuum where the methodologies balanced artistic practice and qualitative research, each one varying its art to research ratio.

Issues in a Contested Field

To better understand arts-based research I examined the assorted terminology used within the field, placing my own interests among these terms. My interests are based specifically in the studio art practice of contemporary artists and how they conduct research when making art. In *Artist Scholar,* James G. Daichendt (2012) acknowledges this existent practice saying,

> For better or worse, artists in the United States apply the language of research to their day-to-day activities without a consistent theoretical and methodological underpinning. Artists refer to their work as research because it is part of the cultural landscape but they often struggle to articulate why it is research and how it contributes to the broader knowledge pool. (p. 1)

Like Sullivan (2005), Daichendt does not see consistency in how artists conduct research or how they describe it to others. Although adding to this theoretical debate, I noticed that professional artists do not contribute to the literature on art/research; rather, most writing comes from researchers within academia.

When comparing terms like artistic inquiry, arts-based research, practice-based research, a/r/tography, arts-informed research, practice-led research, and research-led practice, I found that the definitions changed depending on how research and art interacted. Some academics choose to prioritize research over art, making art a tool of

expression, while others prioritize the art process and see research as only a tool for creation. In noting how these interactions changed, I realized that the practitioner, the question, and the setting greatly affected the theoretical underpinnings of that research practice. Overall, these different practices create a continuum (Table 1), where one end of the continuum represents pure artistic inquiry and the other end captures a traditional qualitative research stance. Depending on how a methodology relates research to art, its position on the continuum can move. As seen in the table below, my depiction of the art/research continuum shows that methodologies overlap and move within the continuum, revealing how certain interpretations are flexible and that many of them are alike.

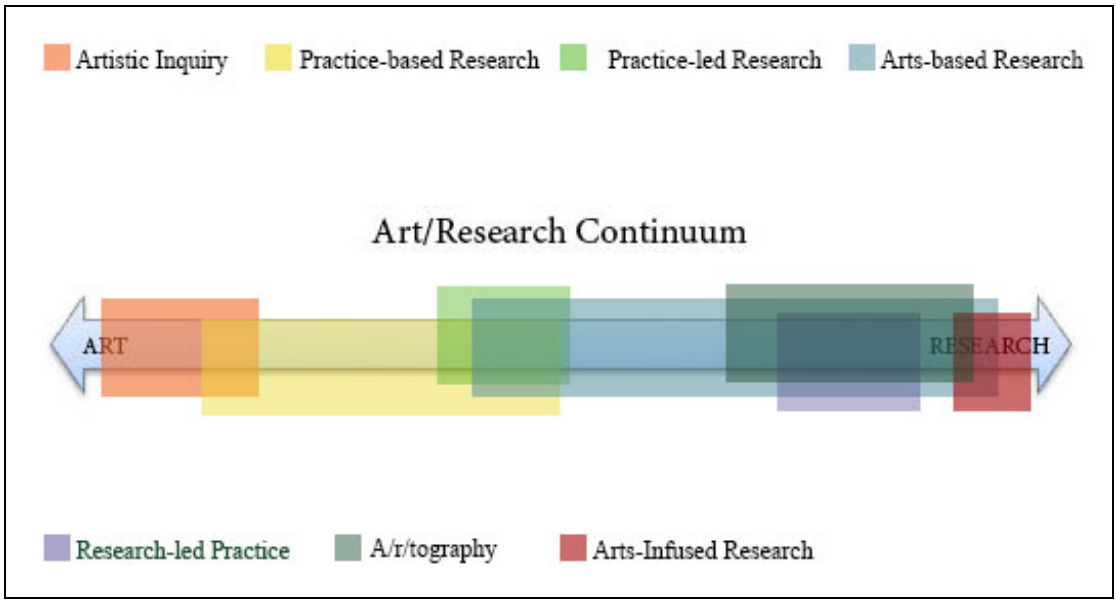


Table 1: Art/Research Continuum

Starting from one end of the continuum, I believe artistic inquiry describes the artist's creative process, which "transcends boundaries between disciplines" and "sees the world as a whole of interrelated facts, ideas, and processes" (Foque, 2010, p. 35). The

artist makes connections to other topics through their work, although artistic inquiry is most concerned with how the artist interprets and confronts these ideas with his/her "personal values and beliefs in an act of enlightened and liberating insight" (Foque, 2010, p. 35). Artistic inquiry focuses more on the process of creation rather than the artist's product, which is more apparent as one moves to the opposite end of the spectrum.

Further along the continuum is practice-based research or studio-based research, terms that are used interchangeably by Sullivan (2005). These terms view the artist as the practitioner, observing his/her work in the art studio and acknowledging that artists employ a mixed methodology approach in their research process. Other academics who use the term "practice-based research" are Smith and Dean (2009), who compare this term to "practice-led research." These terms share qualities with Sullivan's definition, although they broaden the scope to discuss how academic researchers can "learn from a work of art, generating research insights which might then be documented, theorized and generalized" (Smith & Dean, 2009, p. 7). Rather than see the artist as the sole research practitioner, Smith and Dean (2009) believe that the artist serves to inspire others and that the initial work can then be reinterpreted in various directions. This interpretation of research includes the artist, although it does not favor his/her final work as much as Sullivan (2005) who sees the artwork as a representation of research.

Opposite to practice-led research, Smith and Dean (2009) also develop the idea of research-led practice, which is scholarly research that then lends itself to creative work (Smith & Dean, 2009, p. 7). Creative work is defined as "a form of research" that comes from "the training and specialized knowledge that creative practitioners have and the processes they engage in when they are making art [that] can lead to specialized research insights which can then be generalized and written up as research" (Smith & Dean, 2009, p. 5). Practice-led research is more central within the continuum since it balances artistic

creation with the qualitative research equally, although research-led practice leans more towards qualitative research since its product relies more on text-based analysis.

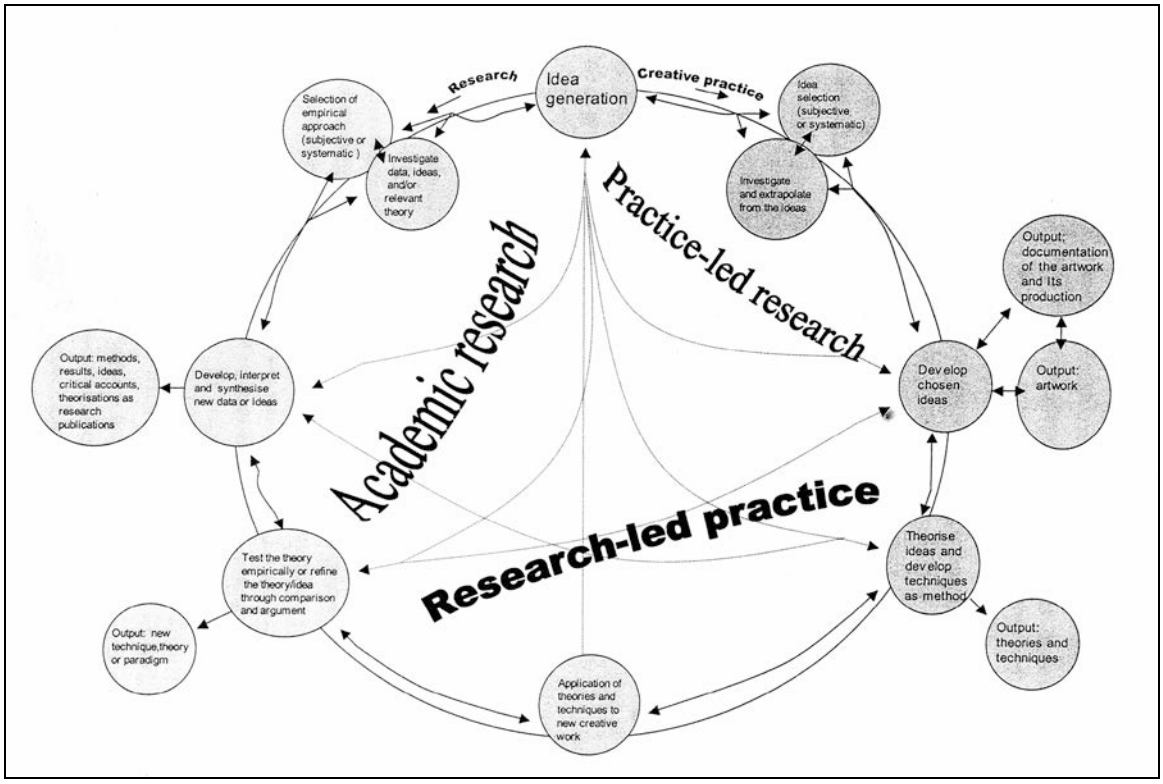


Table 2: Iterative Cyclic Web by Smith and Dean (2009)

Table 2 shows Smith and Dean's representation of how research-led practice, practice-led research, and academic research interact (Smith & Dean, 2009, p. 20). This chart depicts a more interwoven and cyclical process, which they call the "iterative cyclic web" (Smith & Dean, 2009, p. 19). The web displays how these approaches have a repetitive start to end to start process, with no clear entry point into the cycle. I am interested in this chart because it indicates how within each approach the process of research and art is confusingly interrelated, which is different than the simplistic continuum shown in Table 1.

Moving toward qualitative research, Cahnmann-Taylor (2008) and Leavy (2009) identify with the term arts-based research, which places the academic as the practitioner, not the artist. Cahnmann-Taylor (2008) describes two types of arts-based research; one is a hybrid form of artistic and scientific scholarship and the other produces art for scholarship's sake (p. 8). The art for scholarship's sake limits arts-based research to creators who have "years of training in their art form in addition to their studies in the social sciences" (Cahnmann-Taylor, 2008, p. 10). So while Cahnmann-Taylor (2008) includes the artist as practitioner she places equal importance on the academic as research practitioner.

In *Method Meets Art*, Leavy (2009) focuses on social and cultural researchers who can incorporate visual art into their research process due to art's ability to incite multiple interpretations (p. 227). Leavy (2009) describes this relationship saying, "The turn towards artistic form of representation brings social research to broader audiences, mitigating some of the educational and social class biases that have traditionally dictated the beneficiaries of academic scholarship" (p. 255). Arts-based research, in this interpretation, views art as more "emotional and visceral," relying on written research for objectivity (Leavy, 2009, p. 216). Ultimately, this makes the academic's written investigation the primary aspect of arts-based research and the art serves as a visual aide.

Another example of art/research that favors qualitative research is a/r/tography. A/r/tography "is a coming together of art and graphy, or image and word" (Springgay, Irwin & Kind, 2005, p. 900). It looks at the lived experience of the artist/teacher/researcher and, in an ambiguous manner, deals with inquiry, aesthetics and learning (Smith & Dean, 2009, p. 22). An issue especially linked with a/r/tography is that the "representation results in decorative research rather than critical inquiry" (Sullivan, 2006, 24). This term is more widely used by academic practitioners who are

new to art making and therefore do not comprehend how to best translate art from research. Similar to a/r/tography is arts-infused research. As described by Sullivan (2006), Cole and Knowles believe that, "Arts-informed research brings together the systematic and rigorous qualities of scientific inquiry with the artistic and imaginative qualities of the arts" (p. 25). This description of arts-infused research falls into line with a/r/tography and arts-based research, showing how the arts bring creativity, imagination and alternative perspectives to research, yet they are not believed to be sufficiently rigorous or systematic to stand alone.

So while my thesis examines practice-based research as defined by Sullivan (2005), a major caveat in studying this approach is that most contemporary artists do not formally label their process as research. Marshall (2005) describes the postmodern artists as someone who uses "connection, projection, an conceptual collage" (p. 240). In *History as Art, Art as History*, the authors examine contemporary arts' contribution to historical research and feature artists who "make art only after conducting rigorous historical research, deploying critical analytical methods, and engaging with a range of scholarly debates" (Desai et al., 2010, p. 7). In considering how postmodern artists work I must ask myself whether Lead Pencil Studio identifies their practice within this continuum, and if not, is it my role to place them within it?

Theoretical Frameworks

When examining the different approaches that occur within the art/research continuum I found that more literature was written on arts-based research. In arts-based research, the practitioner is using his/her knowledge from qualitative research and placing art making within that academic framework. If the artist becomes the main research practitioner, then what theoretical framework would the artist adopt? When I began to

explore frameworks for the artist practitioner, I considered whether the framework should align with an already established practice or whether it should carve its own path. In asking this, I came to a similar conclusion as Cahnmann-Taylor (2008) who believes that arts-based research (among all aspects of the continuum) should define its "methods in opposition to more traditional approaches to inquiry" (p. 4). So to better situate the artist as researcher, I believe the artist must develop a research method that is complementary yet separate from other methodologies (Sullivan, 2005). Unfortunately, by forging a new path, the artist researcher lacks a critical community, which establishes definitions of quality and creates a sense of consistency (Cahnmann-Taylor, 2008; Eisner, 2008). In order to move forward in my own research, I wanted to then understand the community of standards that practice-based research could possibly contend with, starting with scientific research.

The Scientific Method: Science and Art at Odds?

I chose to examine the scientific research because of how often science and art are referenced in relation to one another when discussing rigor in art (Daichendt, 2012; Foque, 2010; Hanrahan, 2000; Sullivan, 2005). Looking back in history, the Enlightenment and Renaissance mark a time when the artist was considered a valued researcher and his work was thought to be synonymous with scientific inquiry (Foque, 2010; Sullivan 2005). This once harmonious relationship between science and art changed as a result of Modernity when there was an "emergence of two separate worldviews, alien to each other: that of the scientist, who searches for the objective truth, and that of the artist, who makes his own interpretations" (Foque, 2010, p. 19).

Unfortunately, the Modernist's divergent interpretation of science and art does not account for today's artist who bases his/her practice in inquiry and exploration. Both

scientists and artists engage in observations of their surroundings, but their responses to these observations take different forms. Eisner believes that the answers provided by arts-based research are more "ethereal, global, impressionistic, than those secured through conventional forms of research" (Eisner, 2008, p. 23). By creating "ethereal" experiences, the artist does not produce work that displays objectivity, validity and/or transferability of knowledge. Meanwhile, the scientist produces testing that can be "repeatable and universal, in other words, context-independent" (Foque, 2010, p. 33). By producing context-independent findings, scientific research places more emphasis on its product, which if that were transferred to the artist researcher would place significant value on the artist's final work.

Alternatively, if we are to look at how the scientist and artist approach their *process*, then I believe that science and art are quite similar. Hanrahan (2000) states in *An Exploration of How Objectivity is Practiced in Art*, "art making seems to share some cognitive tools with critical modes of inquiry such as science, particularly if 'one focuses not on the works but on the process by which the works are conceived'" (p. 273). In order to reveal the cognitive tools that art and science share, I will first examine the scientific method and then draw parallels to the artist's creative process.

Since the beginning of the 19th century, the scientific method is the most accepted method for pursuing knowledge, privileging "a neutral process of observation, data collection and analysis" (Desai & Hamlin, 2010, p. 49). According to Foque (2010), the scientific method consists of five parts,

> Observation, where empirical facts are gathered and organized; Induction, where hypotheses are formulated; Deduction, where special consequences from these hypotheses are deduced in the form of testable predictions; Testing, where the predictions are verified to be true or false; Evaluation, where the results of the rests confirm or refute the hypotheses. (p. 31)

This method uses an inductive process where the investigation typically involves a problem, a hypothesis, a procedure, and results (Daichendt, 2012). This cut and dry approach de-emphasizes the emotional aspect of processing knowledge, which is seen as a corruptor to otherwise pure information (Desai & Hamlin, 2010). While the steps in the scientific method provide an exemplary framework for artists, it does not account for the subjectivity within the artists' creative process. Sullivan asserts that if artists are "to continue to merely borrow research methods from other fields," then they deny "the intellectual maturity of art practice as plausible basis for raising significant theoretical questions and as a viable site for applying important cultural and educational ideas" (Sullivan, 2005, p. 72). So to empower the work of the artist researcher, I will examine the studio art process as an already established framework.

The Studio Art Process

Before analyzing the studio art process, a dominant idea must first be debunked. I believe that arts-based research has avoided making artists the research practitioners because the artist's creative process has been mythologized to represent a form of "genius" (Weisberg, 1993). This myth of genius, which has become synonymous with creativity, prevents critical analysis. Upon closer examination, we can see that artists do share a common process, although it remains to have a concise description. Daichendt (2012) describes the artistic process as "evidence of thinking made visible" (p. 14). Weisberg describes the artists' creative process as "firmly rooted in past experience" having its "source in the same thought processes that we all use every day" (Weisberg, 1993, p. 3).

As seen in other research methods, the artistic process favors thought and observation; although, an obstacle arises when trying to specify steps within the artistic

process because it is shrouded within the privacy of the artist's studio. Daichendt (2012) describes this challenge saying, "The chore of breaking down what actually happens during studio time is not an easy task. And in order to garner any insight into the studio process, it must either be studied during or after the experience of creating" (p. 47). As I embarked on my own research of the artistic process, I followed Daichendt's advice and studied Lead Pencil Studio during their process of creating.

Defining the Artist's Creative Process

Throughout the following readings I found a nuanced interpretation of the artist's creative process, although the overall intent remained the same. For example, Leavy (2009) identifies four stages within the arts-based research process, listing: problem identification, literature review, methods, and results, which I believe when conducted by the artist, includes: observation, research, creation, and presentation (p. 10). Similarly, Marshall and D'Adamo (2011) describe methods in art that include, "identifying and classifying emerging concepts, connecting these concepts, testing hypotheses, finding patterns, and generating theory" (p. 13). The process here relies on language from science-based methods, but shows the artist's process as one that oscillates between testing and observation.

The literature also emphasizes unstructured experimentation in the artistic process (Daichendt, 2012; Gardner, 1982; Marshall & D'Adamo, 2011; Weisberg, 1993). In *Art, Mind, and Brain: A Cognitive Approach to Creativity*, Gardner (1982) describes the artist's process of experimentation:

> As the individual's focus changes, he may attend specifically to certain forms of information and self-consciously neglect others. He is capable of bracketing problems that lead to blind alleys, or even of 'destroying problems' that threaten him too far away from his chosen network of hypotheses. But in the long run the

> creative individual will predictably return to the major nodes in his network of enterprises in order to construct the most comprehensive system possible. (p. 354)

Gardner (1982) shows how experimentation uses problem solving and concentration to accomplish a greater goal, yet unlike scientific experimentation it does not follow a clear directive.

Sullivan (2001) describes the artist's process as "imaginative thoughts [that] may arise in planning; during the process of making; as a consequence of critical reflection; or through meanings made by others" (p. 2). In Sullivan's interpretation the artistic process is constantly generative, where inspiration spurs experimentation throughout the studio process and other works of art may be created in conjunction to the main task at hand. So rather than "seeing inquiry as a linear procedure or an enclosing process" the artist's process is "interactive and reflexive whereby imaginative insight is constructed from a creative and critical process" (Sullivan, 2006, p. 20).

Weisberg (1993) looks at the artist's initial creative thought as one that comes through a "spontaneous" process or "a string of associations" (p. 254). From there the artist works through an idea in the studio, responding to materials and self-critique. He explains,

> The changes from initial idea to final work occur first because an individual can anticipate and respond to difficulties with a work before it is actually produced; and second, work-in-progress can be judged inadequate, in which case attempts will be made to modify it. (Weisberg, 1993, p. 255)

Smith and Dean (2009) describe two approaches to the creative practice where the artist either creates process-driven work or goal-oriented work. I believe an artist can use both approaches depending on what stage they are working in. Process-driven work allows for ideas to emerge that were once "unforeseen at the beginning of the project" and goal-oriented efforts enable the work to progress, following a schedule with "an

initial plan and a clear idea of an ultimate objective or target outcome" (Smith & Dean, 2009, p. 23).

Foque (2010) brings an alternative approach to the creative process, not only by comparing the artist's creative process to the scientific process, but by also introducing design inquiry. Design inquiry aims to develop "as many hypotheses as possible, not on the basis of exploratory models" but by aiming to create models that probe (Foque, 2010, p. 42). By introducing design inquiry as a creative process, Foque creates a middle ground between scientific research and artistic inquiry, which I believe accurately describes practice-based research. In Table 3, Foque shows the similarities and differences between these three types of inquiry as they run parallel (2010, p. 44). Foque's design in relation to Lead Pencil Studio's studio practice is further examined in Chapter 6.

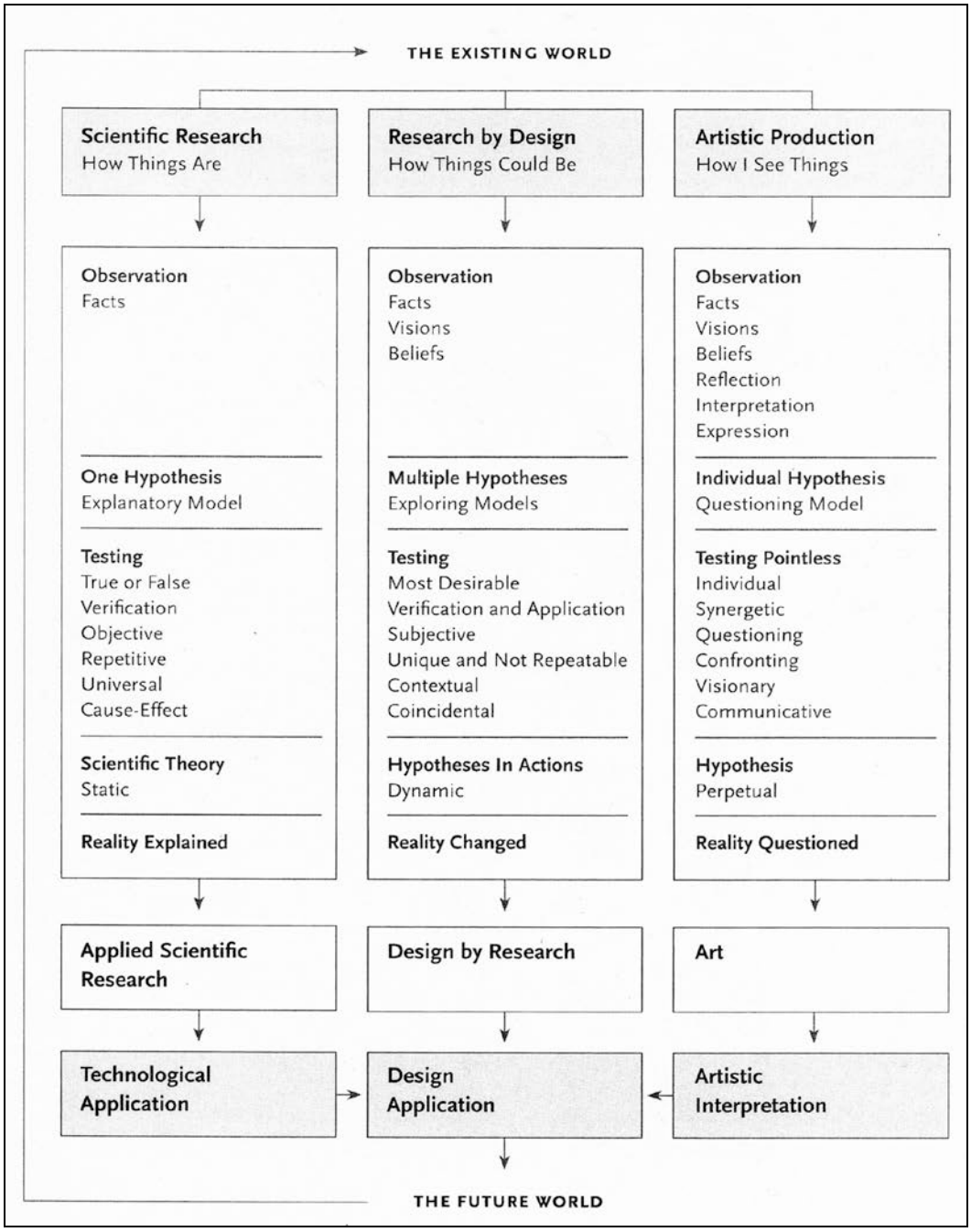


Table 3: Comparison of Scientific Research, Research by Design and Artistic Production by Foque (2010)

Similarly, Howard, Culley and Dekoninck (2008) provide a description of the creative design process as it intersects with cognitive psychology. While these authors focus on design from the perspective of engineering, they show that regardless of the final product there are overarching guidelines that account for creativity's experimentation. Table 4 illustrates the varying terms and steps as interpreted by nineteen different sources (Howard, Culley & Dekoninck, 2008, p. 163).

The table illustrates the range of terminology within the creative process, and that despite those differences there is still a clear progression in thought and action. From this chart I was able to simplify the artistic process into three stages: the planning stage (which combines the analysis and generation phase), the execution stage (evaluation phase), and the presentation stage (communication/implementation phase). Ultimately, I found that the artistic process, while it displays a unique approach to experimentation, still parallels much of the scientist's creative process.

Models	Analysis phase				Generation phase			Evaluation phase	Communication / implementation phase		
Helmholtz (1826)	Saturation				Incubation	Illumination		X	X		
Dewey (1910)	A felt difficulty	Definition and location of difficulty			Develop some possible solutions			Implications of solutions through reasoning	Experience collaboration of conjectural solution		
Wallas (1926)	Preparation				Incubation	Illumination		Verification	X		
Kris (1952)	X				Inspiration			Elaboration	Communication		
Polya (1957)	Understanding the problem	Devising a plan			Carrying out the plan			Looking Back	X		
Guilford (1957)	X				Divergence			Convergence	X		
Buhl (1960)	Recognition	Definition	Preparation	Analysis	Synthesis			Evaluation	Presentation		
Osborn (1963)	Fact-finding				Idea-finding			Solution-finding	X		
Parnes (1967)	Problem, challenge, opportunity	Fact-finding	Problem-finding		Idea-finding			Solution-finding	Acceptance-finding	Action	
Jones (1970)	Divergent				Transformation			Convergent	X		
	Search for data	Understand the problem			Pattern finding	Flashes of insight		Judgement			
Stein (1974)	X	Fact-finding			Hypothesis formulation			Hypothesis testing	Communication of results		
Parnes (1981)	Mess finding		Problem-finding		Idea-finding			Solution-finding	Acceptance-finding		
Amabile (1983)	Problem or task presentation	Preparation			Response generation			Response validation	Outcome		
Barron and Harrington (1981)	X				Conception	Gestation	Parturition	X	Bring up the baby		
Isaksen et al. (1994)	Constructing opportunities	Exploring data	Framing problem		Generating ideas			Developing solutions	Building acceptance	Appraising tasks	Designing process
Couger et al. (1993)	Opportunity, delineation, problem definition	Compiling information			Generating ideas			Evaluating, prioritising ideas	Developing an implementation plan		
Shneiderman (2000)	Collect				Create				Donate (communicate)		
					Relate						
Basadur et al. (2000)	Problem finding	Fact finding	Problem defn.		Idea finding			Evaluate and select	Plan	Acceptance	Action
					Diverge – converge at each stage						
Kryssanov et al. (2001)	Functional requirements	Structural requirements			Functional solutions	Analogies, metaphors		Reinterpretation	X		

Table 4: Comparison of Creative Process Models by Howard, Culley and Dekoninck (2008)

The Role of Writing

For the culmination of practice-based research there are two possibilities in how the research is presented, either the artwork *is* the research or the artist writes a document that connects the artwork to the research (Desai & Hamlin, 2010; Sullivan, 2005, 2006). In *Integrated Curriculum and Our Paradigm of Cognition in the Arts*, Parsons (1998) discusses the artists' cognitive process according to theorist Rudolph Arnheim. Arnheim believes that the cognition for art making is completely separate from traditional language skills. He separates the notion of when one creates art and when one discusses art, arguing they require two separate cognitive abilities (Parsons, 1998). If this is true, then the verbal articulation of practice-based research is entirely separate from the artist's physical process/work. Rather than rely on the artist researcher to verbally articulate the research in his/her artwork, Sullivan suggests the art critic become the main interpreter (Sullivan, 2005, 2006). If the artist does not typically write about his/her work, then this leads me to ask whether writing is a necessary component of practice-based research. But if writing is necessary, is the art critic an appropriate contributor or should the artist be the main contributor?

Philosopher Arthur Danto argues that "interpretations [are] functions which transform material objects into works of art. . . . Only in relation to an interpretation is an object an artwork" (Parsons, 1998, p. 113). Danto asserts that without interpretation artwork is meaningless. A problem with practice-based research is that artwork is at times inaccessible, so the research may not reach a large audience for interpretation. By writing about the work, practice-based research can be cited and further circulated amongst scholarly communities (Daichendt, 2012, p. 54). Writing also helps address the

criticism against practice-based research, which points to its inconsistency and lacking validity. Daichendt (2012) furthers this point affirming that,

> [Writing] can contextualize artwork in history or in a specific area of expertise. Writing can preserve ideas so they can be reflected upon. . . it is reproducible, portable, and permanent. . . . writing allows processes and products to have an impact they may never have had in other fields. (p. 62)

In seeing that writing can be invaluable to the dissemination and understanding of practice-based research, then I want to assess the role of the writer as well.

In qualitative research, the researcher is the writer. However, in practice-based research this role can be diffused, since writing is not an explicit part of the studio art practice. Upon further investigation I found that there was debate on whether writing should be done by the artist or the critic. Before arguing both sides, I want to further explore the identity of today's art critic.

Earlier in American art history, the art critic had a vital role in art. Critics like Clement Greenberg defined art movements and their writings were widely circulated, highly regarded as works that lasted through time alongside the art itself (Relyea, 2013). Nowadays there has been an outcry from the art world claiming that criticism has died. In *Judgment's Troubled Objects*, Ribas (2013) describes how postmodernism derailed the criteria once used to judge art since critics relied on "normative conceptions of race, class, and gender, with aesthetic criteria naturalizing what are in fact relations of power and knowledge" (Ribas, 2013, p. 334).

Contrarily, postmodernism has broadened the scope of criticism as it now calls for a democratic discussion that balances the voice of the critic, the public, and the artist all at once. The critic's voice represents the public's interpretations, which enables artist's to look at criticism as part of their process (Baker et al., 2002). Sullivan (1996) advocates for the inclusion of the art critic since, over time debate around the artwork

becomes part of the work and the critic's writing can define that external meaning, which is placed upon the work.

Daichendt (2012) sees the critic as a burden to an artist's research since the critic's writing comes from an outsider's perspective. Rather, he argues "the artist is in the best position to understand and study the phenomenon of artistic practice since these other disciplines only study the object after its completion" (Daichendt, 2012, p. 55). Unfortunately, Daichendt does not account for the fact that many artists do not want to write about their work. Oftentimes, creative practitioners fight against the theorization or documentation of the creative process because it would diminish the "fire" or "genius" associated with their creative acts (Smith & Dean, 2009, p. 25). The challenge is in making artists see the value in writing, even if they do not want to do it. If this is to occur, then the artist can most accurately connect research and art through his/her reflection (Daichendt, 2012, p. 6).

When comparing the critic and the artist, I see value in the critic's more holistic, historically based knowledge, while I also see value in the artist's personal reflections. Ultimately, I believe the best approach would be to use both texts as evidence of practice-based research, which exist in my own research on Lead Pencil Studio.

Postmodernism and the Artist

Having already referenced postmodernism a few times in this chapter, I want to further explore its meaning and how it defines art and education. In *Curriculum Development in the Postmodern Era*, Patrick Slattery (2006) states, "Critics often maintain that the term 'postmodern' is irrelevant because its meaning is elusive and contradictory, and thus it can be defined in multiple ways to suit the needs of any author" (p. 18). I believe that postmodernism's elusive interpretation can be attributed to its broad

influence and how it has affected many disciplines including architecture, art, education, politics, and literature.

Before its widespread adoption, postmodernism was a term used specifically in art and architecture. Postmodern art can be read literally as post, or after modern. Modern art, which is still has a dominant influence on art history, displays an "abstraction of the pure form" and falls into an "aesthetic doctrine of 'disinterestedness'" (Efland, Freedman, & Stuhr, 1996, p. 18). Modern art also placed the male artist in isolation within his studio, touting his genius as the driving force in his work (Jones, 1996). This approach alienated the majority of its viewers, so postmodern art came forward as a reaction. Postmodern art attempts to broaden communication and reach out to the public in a more comprehensive manner (Efland et al., 1996). No longer is the individual artist's identity associated solely with how he manipulates media, rather the (male or female) postmodern artist is celebrated for his/her ideas (Sullivan, 2006, p. 30).

Postmodern art's reaction to modernism interests me, because I think this trend is slowly occurring in education as well. I believe that the artist researcher contributes to postmodern doctrines, since he/she models interdisciplinary, idea-based work that attempts to answer bigger social questions. The postmodernist approach is also non-linear, which emphasizes "connection, relationship, interdependence and complexity" (Danvers, 2006, p. 89). Postmodern art can show education that "knowledge is always conditioned by the location, purpose and outlook of the knowing subject" meaning that knowing is interpretive and never absolute (Danvers, 2006, p. 89). Cultural theorist, Irit Rogoff states that "works of art no longer simply present existing knowledge; they also offer open-ended narratives and invite further research" (Desai et al., 2010, p. 12). If Rogoff is correct, then postmodern art plays a key role in the creation of an open-ended narrative, which postmodern education embraces.

Before delving too far into postmodern education, I want to further define the postmodern artist. Since I worked with Lead Pencil Studio, a pair of contemporary artists, I wanted to understand how their titles as "artists" fit into the context of my research. Sullivan (2005) defines the artist as, "part theorist, performer, producer, installer, writer, entertainer, and shaman, who creates in material, matter, media, text, and time, all of which takes shape in real, simulated and virtual worlds" (p. 4). In the article, "The Artist in Society: Understandings, Expectations, and Curriculum Implications," Rafael A. Gaztambide-Fernandez (2008) suggests that artists "are constructed within cultural and historical conditions and that individuals are recognized as [an] artist when they fit typologies that are culturally and historically relevant" (p. 236).

Interestingly, when it was believed that great art was created by "the male genius" it was assumed he displayed modernist values like "originality, exemplarity, and lack of rational logic" (Gaztambide-Fernandez, 2008, p. 241). From these three descriptors, the artist's innate talent would produce art that was internally based on emotions, preventing access to the artist's thought process. But today traditional aesthetic skills are less important as long as the postmodern artists' work "challenges boundaries, rules, and expectations and disturbs the social order to promote social transformation and 'reconstruction'" (Gaztambide-Fernandez, 2008, p. 244). The greatest attribute of the postmodern artist is that he/she is a "deep thinker," displaying a "range of conceptual tools, creative approaches, and communal contexts, within which artistic practice takes place" (Sullivan, 2006, p. 30). Continuing from Gaztambide-Fernandez (2008) and Sullivan (2006), Efland, Freedman and Stuhr (1996) define the postmodern artist as someone who creates "a commentary on mainstream ideologies and forms of representation" (p. 34). All in all, postmodern art engages broader audiences in critical thought, which goes hand in hand with the intent of research.

Interdisciplinary Learning and Curricular Implications

When starting this process, I was initially interested in how arts-based research specifically affected the field of art. But, upon further examination I realized that interdisciplinary learning was integral to my research since the artist-researcher implicitly and explicitly crosses disciplines. As discussed by Desai and Hamlin (2010), "artists are increasingly border crossing in anthropology, biology, philosophy, engineering, architecture, and history in order to explore contemporary themes, ideas and questions" (p. 48). In *Postmodern Art Education: An Approach to Curriculum*, "a postmodern curriculum is defined by its interdisciplinary content," which means that if my interest in the postmodern artist is applied to education, I should examine his/her postmodern counterpart: interdisciplinary learning (Efland et al., 1996, p. 44).

Before discussing curriculum integration and all of its nuanced terminology, I will discuss the present educational system and its fragmented disciplines. Discipline, which means a "separate field of study," first appeared in the late nineteenth century in America's higher education, as institutions were attempting to compete with similar systems in Germany (Boston, 1996, p. 4). Unfortunately, this trend only became more entrenched in American tradition, making it more difficult to introduce curriculum integration as a suitable alternative. In arguments against interdisciplinary curriculum, there is concern that the integrity of each discipline will not be maintained (Krug & Cohen-Evron, 2000). Meanwhile in 1993, Harvard President Neil Rudenstine wrote in his presidential report,

> At the present moment, many scholars are convinced that, in order to progress in even quite specialized fields, they must learn much more about — and borrow from — fields other than their own. For many, the actual process of discovery is forcing an even greater integration of knowledge, rather than increasing

> subdivision and separateness… [This tendency] has now become general enough to constitute a genuine shift in outlook. (Boston, 1996, p. 7)

While some private institutions in higher education may embrace curriculum integration it has not reached secondary education. A reason for this resistance comes from the past twenty years where the rise of the accountability movement applied pressure on schools "to divert instructional time and resources toward tested areas of the curriculum, such as reading and math" (Mishook & Kornhaber, 2006, p. 3). Accountability in reading and math can be associated with a Modernist curriculum, which values "rational discourse, time on task, lesson implementation, and objective evaluation" and discourages "aesthetic experiences" that are more central to the arts (Slattery, 2006, p. 243).

At this point art education's role in a fragmented curriculum places it on the "sidelines," which according to Mattson (2010) ignores our increasingly visual world and our problems that require "creative solutions" (p. 17). If education were to embrace interdisciplinary learning it would embody much of the postmodern curriculum, which emphasizes the arts and "the primacy of the experience, the merging of form and content, the recursion and convergence of time, the celebration of the self-conscious individual, and the understanding of phenomenological experience" (Slattery, 2006, p. 258). Encouraging disciplines to integrate would not only make thinking more cohesive, but it would also enable art education to become a more powerful player in education.

Already there are studies that show how the arts can positively impact learning, which would support a more widespread implantation of arts integration. In a study done by the Center for Arts Education Research at Teachers College Columbia University, researchers found "significant relationships between rich in-school art programs and creative, cognitive, and personal competencies needed for academic success" (Burton,

Horowitz & Abeles, 1999, p. 36). The arts affected five abilities in learning, which included the ability to,

> Express ideas and feeling openly and thoughtfully; Form relationships among different items of experience and layer them in thinking through an idea or problem; Conceive or imagine different vantage points of an idea or problem and to towards a resolution; Construct and organize thoughts and ideas into meaningful units or wholes; [and] Focus perception on an item of experience, and sustain this focus over a period of time. (Burton et al., 1999, p. 42)

These abilities show traits that also exist in the artist's studio practice, which I believe could serve as a model for arts integration. I further explore this connection in the conclusion of this study.

While I believe arts integration can advance interdisciplinary curriculum, I found others who disagreed. In a 1992 address, the National Art Education Association stated, "the arts must maintain their integrity and not be used as an aid to other disciplines" (Mishook & Kornhaber, 2006, p. 4). Arts integration is a tricky term since there is no "shared agreement on what arts integration should look like, or even whether arts integration should be a goal of arts education" (Mishook & Kornhaber, 2006, p. 4). And by not having a clear agreement, the arts can become decorative components to an academic lesson, making the arts less significant. In order to overcome this resistance to arts integration there must be a clear idea of how art can have an important role in the curriculum, maintaining equal status to disciplines like math, science and writing/reading.

Integrating art into other disciplines also supports my belief that the artist researcher crosses many disciplinary boundaries in his/her research. Marshall (2005) argues that art can "reveal the foundation of each discipline" (p. 229). Desai, Hamlin and Mattson (2010) believe that "multi-modal ways of representing human experiences are now commonplace," and art can fully unpack these experiences (p. 5). In *Integrated Curriculum and our Paradigm of Cognition in the Arts*, Parsons (1998) states that art not

only creates connections across disciplines but it broadens cognition because it introduces an entirely new language — a visual language.

Approaching Divergent Terms

As I delve into recognizing the impact my work with art/research can have on curriculum, I must acknowledge the difficulties I faced when distinguishing the terms used within interdisciplinary learning. Much like my experience with the terminology in arts-based research, I found that some of the terms showed differences while others were indistinguishable. In *Curriculum Integration Positions and Practices in Art Education*, Krug and Cohen-Evron (2000) examine terms like: interdisciplinarity, multidisciplinary curriculum, integrated learning, transdisciplinary curriculum, and curriculum integration. While Krug and Cohen-Evron (2000) primarily use "curriculum integration" as an all-encompassing term, the other terms help address more specific approaches to integration and learning. Applebee, Adler and Flihan (2007) describe an "interdisciplinary continuum" that ranks interdisciplinary approaches into either: everyday knowledge, disciplinary separation, correlated separation, shared and reconstructed disciplines and then full elimination of disciplinary boundaries (p. 1005). Using Applebee, Adler and Flihan's interpretation of interdisciplinary learning shows that educators have choice in how they approach interdisciplinary teaching, and that integration can be adjusted depending on the lesson or the particular day.

Meanwhile, Foque (2010) references Jean Piaget's definitions of integration using the terms multidisciplinarity, interdisciplinary collaboration, and transdisciplinarity. I was especially drawn to these terms, which are defined on a scale similar to the interdisciplinary continuum. Multidisciplinarity occurs when information from another discipline is used to solve the problems in one's own discipline; interdisciplinary

collaboration occurs between several disciplines where all disciplines are enriched by each other; and transdisciplinarity occurs when disciplines are not only interacting but reintegrating so that disciplinary boundaries are totally removed (Foque, 2010, p. 24).

In my own writing, I found myself alternating between arts integration and interdisciplinary learning, although I see Piaget's transdisciplinarity as an ideal version of integration. In looking at the state of education today, I do not anticipate transdisciplinary curricula to have a strong presence, but I believe the contemporary artist has moved towards an approach that continually blurs boundaries. In my observations of Lead Pencil Studio's art/research, I consider their transdisciplinary moments and how those can be modeled for classroom learning.

Conclusion

At the beginning of this chapter I stated that my investigation was connected to topics like creativity, collaboration, and the psychology of learning. In art and research, I found that creativity exists throughout the various methodologies, linking even science and art together in the creative process. Also, the collaboration that bridges together art and research transfers to education where interdisciplinary learning promotes collaboration between disciplines. Interdisciplinary learning and arts-based research are also connected via their cognitive skills, showing how the professional artist displays similar techniques of learning as the interdisciplinary student. Both of these approaches also align with postmodern attitudes, which invites broad interpretations and furthers confuses any defined theoretical frameworks that could clarify either arts-based research or interdisciplinary learning.

In looking over this confusing spectrum of terminology, I wonder if I am more attracted to arts-based research and interdisciplinary learning because I my research can

forge its own path. In the next chapter I show how I approached these ideas through a narrative case study, which granted me the flexibility to interpret situations much like other postmodern artists/educators.

CHAPTER 3: A METHODOLOGY FOR RESEARCHING METHODOLOGY

Introduction

At first glance, my methodology seems confusing since my research question aims to examine another research methodology. But to put it simply, I am using narrative case study to learn about practice-based research. I chose to not use practice-based research as my methodology because I believed my investigation would become entangled in bias and conflicting interests if my research tool were also the object of my research. Really, how could I examine the role and legitimacy of practice-based research if I were already trusting in it as my methodology? I wanted to observe practice-based research in its intended environment, choosing established artists with a developed studio practice. So by using a more established form of qualitative research, like narrative case study, I felt assured that my writing would display a comprehensive understanding of practice-based research and its influence on interdisciplinary learning.

Initially, the role as "researcher" felt like a daunting role. My previous associations with educational research began as an undergraduate when I worked for Professor Shirley Brice Heath at Brown University. Heath, a linguistic anthropologist, was studying the intersection of learning science and math through learning art in non-profit organizations. During the summer of 2008, I worked as a studio assistant in an art non-profit while writing ethnographic observations for Heath. That summer I juggled the role of teacher, disciplinarian, assistant, mentor, artist and researcher. I was overwhelmed by the multiplicity of my roles, but ultimately felt rewarded in seeing how things could come together in my weekly reflections.

When choosing a methodology, my immediate response was to recreate that 2008 experience and work with ethnography. I was initially drawn to that experience because I knew it had effectively challenged my views and expanded my perspective. While my research uses some ethnographic techniques, I knew I had to avoid familiarity for comfort's sake and cater my methodology to this specific research. This ultimately led me to narrative case study, a mixed methodology that I expand upon in the next section.

What is Narrative Case Study?

Case Study

My research methodology combined techniques from case study and narrative. I chose case study methodology because my thesis most importantly addresses the phenomenon of practice-based research. Weisberg (1993) argues that case study is the best method to use to make inferences about the creative process, which supports my belief that the creative process in practice-based research should be observed firsthand. My use of case study also aligned with the guidelines described by Hancock and Algozzine (2006), who describe the study of particular participants (Lead Pencil Studio), that are bound by space and time (the artist residency) and restricted to observations in a natural context (the artists' studio) (p. 15).

Case studies can be more specifically classified by their intent, whether they are instrumental, intrinsic, exploratory and/or descriptive. While, I believe my case study addressed multiple variances within each classification, my work primarily aligned with a descriptive case study, which presented "a complete description of a phenomenon within its context" (Hancock & Algozzine, 2006, p. 33). My work also attempted to "better understand a theoretical question," as described in instrumental design. Although, Hancock and Algozzine (2006) describe instrumental case studies as being so heavily

focused on the theory that "the particular issue being examined is of secondary importance to a greater insight of the theoretical explanation that underpins the issue" (p. 32). While I am interested in examining the structure and theory behind practice-based research, I consider the narrative of the artist-participants to be of equal significance. My research also displayed characteristics similar to intrinsic case studies, since I studied specific individuals in great detail, but the focus was not so narrow that I was unconcerned with the general theories or broader connections that could be made from this particular case. Together all these considerations created a nuanced descriptive case study, but when defining my methodology I realized a case study alone did not account for my use of personal narrative.

Narrative Research

I believe that case study created necessary boundaries for my research, but narrative inquiry allowed me to create a relatable story. Newkirk (1992) argues in *The Narrative Roots of Case Study* that "we are all storytellers" and the "more honest strategy" in methodology would be one that allows storytelling to engage the audience (p. 134). I wanted my work to display honesty and acknowledge that subjects are not "static, atemporal, and decontextualized" (Pinnegar & Daynes, 2007, p. 11). By using narrative to describe the artist-participants I placed them in a broader context that accounted for their environment and their background. Like other qualitative research, narrative embraces context as a crucial component to the creation of meaning, but it also extends that context beyond the participant's background to the author and to the interpretation of the reader (Clandinin & Connelly, 2000). I believe that by looking at the participant, the researcher/author, and the reader's background, narrative creates a more engaging story.

Narrative research also placed my fieldwork in the midst of my own experiences and the experiences of the artist-participants, providing readers with a deeper connection to the work. Clandinin and Connelly (2000) contend that narrative "is the best way of representing and understanding experience" (p. 18). Experience has a dynamic effect on research because it is "inward and outward, backward and forward," meaning that internal feelings, hopes, aesthetic reactions, and moral dispositions can then be compared to the outward environment that occurs around us (Clandinin & Connelly, 2000, p. 50). Experience also acknowledges the existence of the past, present, and future, allowing details to gain significance as they are explained amongst a fuller timeline.

By including my own experience, my research became more transparent. In *Doing Qualitative Research in Education Settings*, Amos (2002) states, "Our own perspectives color what we see when we look. We decide what settings to study, what to pay attention to, and what to write down—all interpretive acts" (p. 79). I believe narrative research enables those "interpretive acts" to be described as conscious acts, which gains the confidence and trust of the reader. Narrative ultimately redefines the researcher, showing his/her biases and life experiences rather than hiding behind a "perfect, idealized, inquiring, moralizing self" (Clandinin & Connelly, 2000, p. 62). While this approach may seem jarring compared to other methodologies, I believe it helped portray my fieldwork as an honest and open exploration.

Ethnography

While ethnography is not central to my research methodology, I believe that its fieldwork lends itself to case study and narrative research. From ethnography fieldwork I included techniques described by Moss (1992) such as, "participant observation, formal and informal interviews of informants, photographs, audio and video recordings of daily

occurrences in a community, [and] gathering of physical artifacts that are a part of the daily routine of a community…" (p. 159). Concurrently, the narrative researcher requires the use of daily notes that are "full of details and moments of our inquiry" (Clandinin & Connelly, 2000, p. 104). The narrative field notes are more reflexive in nature, which enabled me, the researcher, to be more aware of my own biases (Clandinin & Connelly, 2000; Newkirk, 1992). By combining these methods, I believe my research balanced the intrigue of storytelling with the informant nature of case study and ethnography.

Ethnography also calls for fieldwork that is "multi-dimensional" and makes the observer visible in the "production of knowledge" (Desai, 2002, p. 311). Much like narrative, ethnography describes the researcher as "positioned subjects," meaning they "understand that their race, social class, gender, and sexuality play exigent roles in the field" (Desai, 2002, p. 312). I believe that by describing my own experiences and personal background through narrative, I was able to address the ethnographer's social and political position of power.

Participants

In order to perform my research, I had to find an artist-participant whose studio practice was easily accessible for prolonged observations. I initially considered studying multiple artists so I could compare their studio practices, but I worried that this approach would spread me thin and then my data would be insufficient. This led me to focus my investigation on one participant. My criteria was that he or she must identify as a professional artist, have a significant career in the fine arts, have a current studio practice and show interest in articulating his or her working process. My serendipitous encounter with Lead Pencil Studio in the spring of 2012 led me to refine my criteria even more. In seeing how the two artists of Lead Pencil Studio interacted I realized that I would be able

to witness a process dialogue that usually occurs internally. Choosing to research a collaborative rather than an individual helped my research because I was able to observe conversations about research and process in a more natural environment.

Since I had found artists that exceeded my criteria, the next move felt scary. How could I recruit Lead Pencil Studio to be my participants without overwhelming them? Fortunately, the director of the Visual Arts Center, Jade Walker, brokered my initial contact with the artists. The VAC residency was created at The University of Texas at Austin so that students can interact with professional artists and I believe my role as researcher fell under this umbrella. My research then became another way for the artist-in-residence program to build relations within the College of Fine Arts.

As the artist's January 2013 residency approached, I aimed to slowly build rapport with Lead Pencil Studio so that my observations would not have such a steep relational curve. From the beginning I had to ask myself, what kind of relationship do I want to build with Lead Pencil Studio and how will an alliance affect my research? My initial conversations with the artists occurred via email where I was able to briefly explain my intent. Our contact began in May 2012 but was infrequent and sparse, meaning that our relationship did not fully begin until the artists were on campus in January 2013. Having spent so much energy preparing for my fieldwork, I felt odd when I met the artists again in January. Our relationship started out as one-sided. I knew plenty about them, but from their perspective I was one from a group that would be contributing to the residency.

In observations and interviews, the rapport that the researcher builds with his/her participants is decisive for the direction of the research. Seidman (1998) describes the importance of rapport when he says, "Too much or too little rapport can lead to distortion of what the participant reconstructs in the interview" (p. 81). Therefore the interviewer

must strike a balance in building rapport so that the participant feels comfortable but not so much that the topic of research is diminished in the conversation (Seidman, 1998). Meanwhile, Fontana and Frey (1994) state that, "the researcher must adapt to the world of the individuals studied and try to share their concerns and outlooks" (p. 371).

Coming from a narrative perspective, I strove to make the interviews more of a conversation, lowering the barrier between the artist-participants and I so that their narrative felt more natural. Narrative inquiry recognizes rapport as a relationship between the researcher and participants where each person will "learn and change in the encounter" (Pinnegar & Daynes, 2007, p. 9). I believe narrative inquiry helps recognize the "implausibility of being able to truly distance" oneself from the research, therefore enabling the researcher's reflection to reveal the struggle in balancing professional distance and friendship (Pinnegar & Daynes, 2007, p. 15). In Chapter 5 I further discuss the relationship I built with Lead Pencil Studio and how I believe that close association influenced my observations and analysis.

Location of Study

Originally, I had intended to observe the artists in their studio in Seattle, Washington. I viewed Seattle as a home base, assuming that their studio space would reveal an insular practice, free of external influences. Unfortunately, I was unable to visit Seattle because of the artists' hectic schedule, which makes their time in Seattle quite often short lived. In this stage of the artists' career, Seattle has become a location where Daniel and Annie can temporarily rest and find time to build ideas. Their installations are so large and site-specific that the artists must follow requests for their projects around the United States and beyond. In many ways their studio space is constantly changing as

they travel from project to project, and the Seattle studio has become only one of their many workspaces.

Due to the intensity of their residency at The University of Texas at Austin, I was confident that my observations of the artists on campus would allow me to see the full extent of the artists' process and my interviews would fill in any other contextual gaps. My observations mainly took place at The University of Texas at Austin in the Art Building's gallery space, known as the Visual Arts Center (VAC). The space consists of four separate spaces, with the Vaulted Gallery being the most prominent space. The Vaulted Gallery hosts an Artist-in-Residence every semester (Fall and Spring) and has been doing so since the fall of 2010. This space is also the most visibly prominent of all the galleries since two of its walls are glass, which face in toward an open courtyard and an indoor sitting area/study space for students. Since the work from the residency program tends to be site-specific or large in scale, artists must treat the gallery as a temporary studio space and their process is oftentimes exposed to the public.

To better explain the space, I included two images of the Vaulted Gallery, which are featured on the Visual Arts Center website. Figure 1 shows the Vaulted Gallery when it is not in use. In that figure, one can see the 27-foot walls and the barrel vaulted cement ceiling. In the left corner of the photo there is a first floor entrance to an adjoining gallery, which was covered in drywall during Lead Pencil Studio's residency. Figure 1 also shows the space from the perspective of where I often sat and observed. Meanwhile, Figure 2 illustrates a floorplan of the Vaulted Gallery as provided by the Visual Arts Center.

Figure 1: Vaulted Gallery Photo

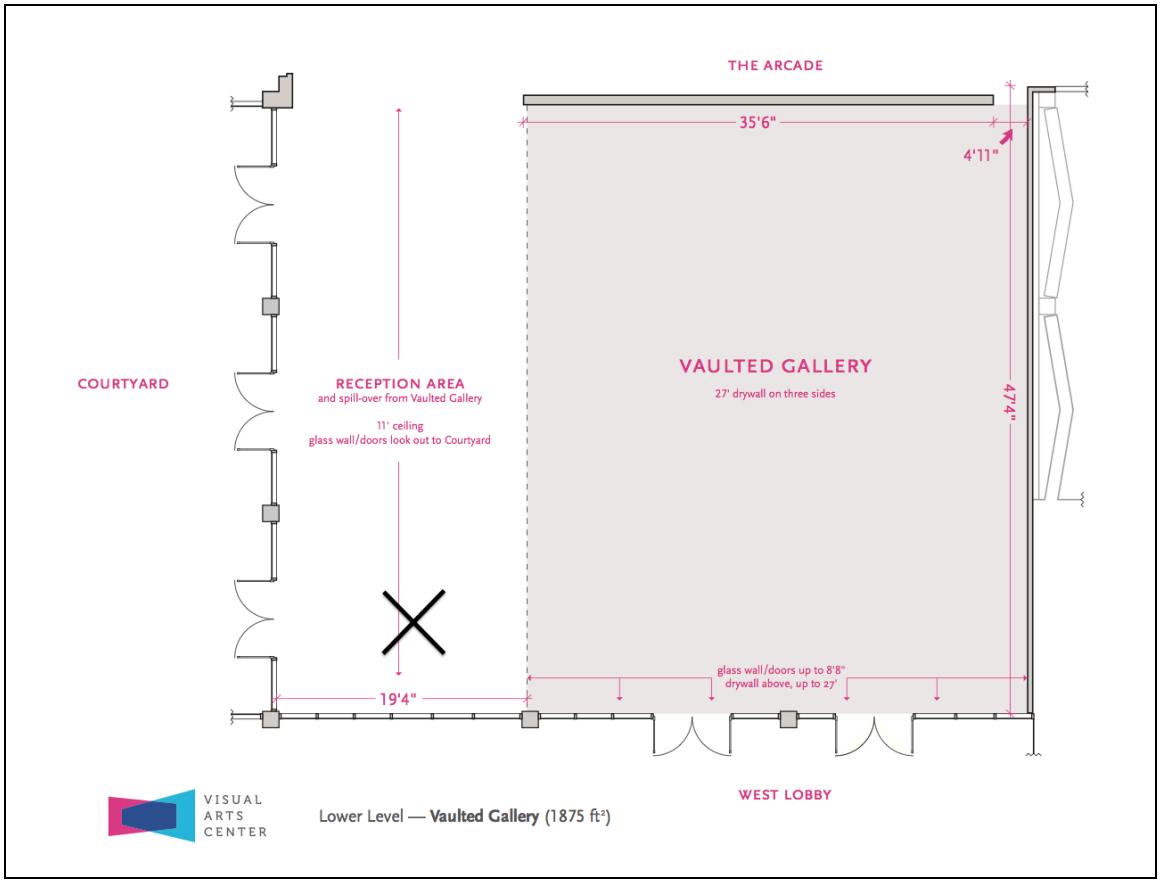


Figure 2: Vaulted Gallery Floorplan

The "X" drawn in Figure 2 marks the front corner of the gallery space where I spent the majority of my observations. This location was incidental but it became a proximal location to where the artists would stand when discussing the status of their work. I also spent many days pacing the work site, following the artists within the gallery space. I found the gallery to be the most important location of my study. Many informal conversations occurred in that space, which informed my field notes, but I also conducted one major interview in the space as the artists were in the midst of building/installing.

My other interviews occurred at Mozart's Coffee Shop in Austin and via google phone. The first interview location was chosen because the artists' temporary housing

was in the neighborhood, but also because I wanted to remove our conversation from the work site since we were discussing their background and initial research. As I previously mentioned, the second interview occurred in the Vaulted Gallery since the artists were under a time constraint, and they were already spending most of their time in the gallery. I did make sure to conduct our interview on a weekend so that our conversation could remain private while the gallery was relatively empty. Our final interview occurred via google phone and not in person due to time constraints. In retrospect, I found this distance to be useful since the artists were able to separate from the work site and take the time to reflect on their experience from the comfort of their home in Seattle.

Timeline of Study

I defined the timeline of my study in two ways. First, there was the physical time I spent at the Visual Arts Center observing, and second there was the conceptual timeline I created to describe the artists' process. Since the Visual Arts Center was central to observing Lead Pencil Studio, my observations were bound to the timeline of the artists' residency program. The artist-participants arrived to Austin, Texas January 3, 2013 and departed February 5, 2013, making my observation period just over a month.

While my case study was short compared to my previous work in ethnography, the month I spent with the artists felt long. I knew my time with them could not be observed later on so I felt a lot of pressure to be in the space, even after I had collected the appropriate amount of data. I read a quote in *Doing Qualitative Research in Education Settings* from Lincoln and Guba that said, "Redundancy is typically eschewed in life, but in this instance it is a most useful criterion: Repeat until redundancy—then just one more time for safety" (Amos, 2002, p. 90). In the span of one month, redundancy became common and I had to teach myself to become comfortable with it.

The learning curve within this month enabled me to track my inconsistencies and attempt to correct them as a researcher. Every weekend I would sit down with my field notes, look over my work and write a summative journal entry that not only tracked the artists' process but also my own. At this point I cannot imagine a shorter or longer timeline. The one-month period afforded me time to make mistakes but it also provided me enough time to create a routine and to learn how to appreciate redundancy.

Throughout my observations I noticed how many themes bled together, weaving in and out of conversation. Even though the themes recurred and bounced around, I structured my observations to follow a more linear conceptual timeline. Reflecting on my own studio art experience, I believe that the artistic process begins with sketches and preliminary research, it continues into the studio and then finishes with a critique or gallery show. Thinking of the process through a lens that would separate aspects of the artistic process, I was inspired by *Seven Days in The Art World* (2009) an ethnography written by Sarah Thornton, which describes the art world through small vignettes. I wanted to depict the artist's process through three vignettes that would help label the major themes that occur during the creation of a single piece of art. While my initial definitions came from my own studio practice, I found that my examination of the creative process in Chapter 2 aligned with my experiences (Foque, 2010; Howard, Culley & Dekoninck, 2008; Sullivan, 2001). Ultimately, I divided the stages as follows: the planning stage, the execution stage, and the presentation stage.

The stages of the artists' process were especially significant to how I structured my interviews. For each interview, I tried to align our conversation with the stage that I believed was occurring. I structured my observations similarly by tracking the artists' process and framing their actions within an ascribed stage. While the stages create a sense of linear progression, they were oftentimes observed simultaneously or in an

alternative order. If nothing else, the timeline helped me maintain a sense of sanity throughout my fieldwork.

Fieldwork

By choosing to use narrative case study, I knew that fieldwork would be central to accurately depicting Lead Pencil Studio. My fieldwork relied on three approaches: observation, interview, and non-interactive data collection. Clandinin and Connelly (2000) describe narrative fieldwork as texts that show "growth and change rather than fixing relations between fact and idea" (p. 95). In order to show growth and avoid stagnancy, I repeatedly examined my approach to fieldwork. Throughout my process I would ask myself how those approaches influenced one another. By practicing a variety of different approaches I was able to better compare the data and ensure validity through triangulation.

Observations

As I previously described, my observations took place in the Vaulted Gallery of the VAC where the artists conducted their residency. I felt that observations were pivotal to researching the artist's process because the artists' actions and behaviors could be tracked, gathered, and described rather than collected from an interview-based recollection. I believe that if I had only used interviews, then the artists' description of research and process would have been unconsciously filtered by their biases. By using observation, I was also able to critically understand the mundane details in their day-to-day actions, which eventually influenced the direction of my interviews.

My observations were secured in a small journal that I kept on me at all times. Amos (2002) describes the importance of journals when he states,

> I think all qualitative researchers should keep research journals, especially those doing observational studies. Research journals provide a record of the affective experience of doing a study. They provide a place where researchers can openly reflect on what is happening during the research experience and how they feel about it. (p. 88)

From a case study perspective, my journal served as a place where I could write "descriptions of contexts, actions, and conversations written in as much detail as possible given the constraints of watching and writing in a rapidly changing social environment" (Amos, 2002, p. 77). From a narrative perspective I also viewed my journal as a space where I could critically and openly reflect on my experience, but I oftentimes felt constrained by my own conscience and debated whether it was appropriate to write critical notes while I was in the same space as the artist-participants (Clandinin & Connelly, 2000).

Another issue during observations occurred when I sat in the space. Even though I wanted to take constant notes, I also wanted to be inconspicuous and create a relaxed "observer-free" environment. I resolved this struggle as I took a more active role in the studio and my role as researcher evolved towards studio participant. Since the goal of observation is "to understand the culture, setting, or social phenomenon being studied from the perspectives of the participants," I experienced an easy transition from observer to observer-participant (Amos, 2002, p. 72). Amos (2002) goes on to say,

> Observers attempt to see the world through the eyes of those they are studying. They observe carefully in an effort to acquire "members' knowledge and consequently understand from the participants' point of view what motivated the participants to do what the researcher has observed them doing and what these acts meant at the time. (p. 72)

While participation alleviated my sense of intrusiveness, I worried that it would cause me to miss important data. This led me to rely on my phone as a recording device so I could be present in the space while tracking conversations. When I used a recording device I

was concerned that it could change people's tones but since the recording was on my phone, it went unnoticed. For my personal use, I also took photos of the studio space as it evolved. These photos helped me recall details from my field notes because I was able to look at a dated photo showing the physical progress of the installation and compare them to that day's notes.

Interviews

I believe that observation was critical in showing me Lead Pencil Studio's process, but the interviews enabled the artists to reinforce and elaborate on themes that I witnessed. I initially modeled my interviews after Graeme Sullivan's case study of contemporary artists in his article, "Critical Interpretive Inquiry: A Qualitative Study of Five Contemporary Artists' Way of Seeing." In this study, Sullivan (1996) conducted a tape recorded interview with each artist, which asked for descriptions of the artists' typical working process, discussed the processes and problems posed in curating a show, discussed audience expectations, and finally got reactions to the critics' responses to their artwork. My interviews followed Sullivan's ideas but were further separated according to how those questions aligned with the three stages of artistic process (planning, execution and presentation).

Hearing the artist-participants speak about their research and process also informed me when I would retuen to observe them in the studio space. In support of my approach, Seidman (1998) states that interviewing "provides access to the context of people's behavior and thereby provides a way for researchers to understand the meaning of the behavior" (p. 2). I found that my informal interviews, which occurred during observations, focused on the behavior of the artist-participants and their responses helped clarify questions that arose in the moment. As the residency progressed, the observations

and interviews became interdependent and I could not separate which had informed the other. Amos (2002) describes the relationship between observation and interview, emphasizing how interviews reveal meaning that are "hidden from direct observation and taken for granted by participants" (p. 91). The interviews not only bolstered my observations but they helped me build a relationship with the artist-participants, pushing me to delve deeper into observations as I moved forward.

There are three types of interviews a researcher can conduct: structured, semi-structured and unstructured. Another term used by Amos (2002) is either formal or informal interviews. Coming into my fieldwork I was prepared for three semi-structured interviews. These interviews had been pre-arranged with a designated time and location, making them more formal. Seidman (1998) describes how structure in interviews helps maintain focus and provides a sense of direction, balance, and meaning. I found this to be especially true in my formal interviews where I relied on notes and pre-selected questions to help pace my time and keep me on task.

Once observations were underway, I began to talk more casually with the artist-participants on site and would ask questions that felt relevant in the moment. These unexpected conversations could also be considered unstructured or informal interviews, which greatly informed my field notes. Amos (2002) describes informal interviews as "sidebars to the action" and that they also "require the ability to engage participants in reflective conversation about that action" (p. 107). At first my observations were uncomfortable and I felt like every interaction with the artist-participants had to be relevant to my thesis question but as time went on our conversations became more casual. This transition actually allowed me to facilitate more productive conversations that were at times unexpected because of where the conversation began. I believe my ability to converse with the artist-participants reflects narrative inquiry since our conversations

were “marked by equality among participants and by flexibility to allow participants to establish forms and topics appropriate to their group inquiry” (Clandinin & Connelly, 2000, p. 109).

While my unstructured, informal interviews were not easily tracked I very purposefully had three semi-structured, formal interviews with the artist-participants (See Appendix B for sample interview questions). Seidman (1998) advocates for a three-interview series, which allows the interviewer and the participant to build context and explore the meaning of an experience. He explains,

> The first interview establishes the context of the participant’s experience. The second allows participants to reconstruct the details of their experience within the context in which it occurs. And the third encourages the participants to reflect on the meaning their experience holds for them. (Seidman, 1998, p. 11)

Interestingly, the three stages I associate with the artistic process parallel Seidman’s three interviews. The planning stage, much like the first interview, examined the artists’ background research and provided an understanding about the context for the project. The execution stage, like the second interview, examined the process of making art, which is the experience of the artist. And finally the presentation stage, like the third interview, looked at how artists reflect on their work and how they then present that constructed meaning to others.

One unique aspect to my formal interviews was that I always interviewed Daniel Mihalyo and Annie Han together. Unlike a typical interview, which is one-on-one, I had to navigate a group interview since the artists take equal part in the studio process. In the group interview the conversations were not strictly back and forth and I had to learn how to balance my role as moderator and interviewer. I found that the artist-participants would both answer my questions, taking turns to answer first and also adding on to whatever the other had said. I interviewed the two together out of convenience and also

because their work is so collaborative. I believe that the group interview has many advantages: it was "data rich, flexible, stimulating to respondents, recall aiding, and cumulative and elaborative" (Fontana & Frey, 1994, p. 365). I also enjoyed that the group interview provided me the opportunity to observe the artist-participants' relationship as they listened and reacted to each other, oftentimes changing the direction of the interview and removing much of my governance as the interviewer (Clandinin & Connelly, 2000).

Non-interactive Data Collection

While observations and interviews accounted for the majority of my fieldwork, I found that non-interactive data also informed my research. Non-interactive data is a term used by Amos (2002), which describes data that has been "produced as part of the participants' natural experience, not in response to requests from the researcher" (p. 118). This data includes artifacts, which are commonly collected in ethnography, but in my situation it was predominantly, pre-existing literature written about the artist-participants. In my first week of observations, I was able to copy a large stack of papers that Jade Walker had collected leading up to the arrival of Lead Pencil Studio. This packet included web articles, journal reviews and mini-biographies along with the artist's initial proposal/architectural drawings. These pieces existed independent of my research, classifying them as non-interactive data even though they informed my background research on the artists. Also, the Visual Arts Center and The University of Texas at Austin conducted independent interviews with the artists due to their status as Artists-in-Residence. I collected this data to aid and triangulate my own findings. Another large source of information came from the artists' talk and their gallery walk-throughs, which I observed as an audience member. Since the artist talk and gallery walk-through is a

common part of the residency and it is intended for an audience, I found this data to be non-interactive as well. All together the non-interactive data informed my background research, but it also informed me just how much the artists were already being researched and analyzed by their host institution. When I began to look over the data I had collected from other sources, I wondered what my role meant amongst them. I further explore this question in my narrative in Chapter 5.

Data Analysis

Once I conducted my fieldwork, I had a folder full of semi-structured interviews, informal conversations, journal entries, photographs, and articles. My greatest challenge occurred in transforming my data into a cohesive narrative that both described and explained my fieldwork while also acknowledging my own narrative within the research. Clandinin and Connelly (2000) state that narrative researchers must "fight against [the] desire to let field text speak for themselves" so I had to critically examine my experience and piece together non-linear observations in order to create a linear story (p. 130).

In my observations, I organized my data by devoting a journal to my studio observations and then creating a folder on my laptop for my photos and recorded conversations. Each journal entry, recorded conversation, and photo was given a date, time and location so I could easily compare the different media clips based on time and location. Amos (2002) believes that the researcher should write daily notes to accompany each day's observations, filling in any gaps that might come from simply recorded conversations or quickly written notes. Instead of writing daily notes, I wrote weekly reflections that would look over that week's progress and then I would create a narrative based on my photos, recordings and notes.

For any conversations that were longer than a minute, I transcribed those conversations. With time, I realized it was important to keep notes about body language and other non-verbal cues that occurred in my interviews so that I could determine whether the transcribed interviews were influenced by other factors (Hancock & Algozzine, 2006). This was especially pertinent to my formal, semi-structured interviews, where I had more one-on-one time with the artists. When transcribing the interviews, I also had to analyze the artists' colloquial responses and at-times confusing tangents to see whether they affected my interpretation of the data.

Once my data was organized, I categorized the transcriptions into interviews, recordings or non-interactive data. I then re-read the information and looked for themes that arose from the artists' descriptions. I was able to identify five major ideas, which were: inspiration/observation, background information, material research/editing, role of artist, and revealing research/role of critic. From there I assigned each idea a color and then color-coded my notes.

In the final stages, I used triangulation to edit my work and made sure that my representations of the artists were accurate. Triangulation is the process "of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation. . . . [also it serves] to clarify meaning by identifying different ways the phenomenon is being seen" (Stake, 1998, p. 97). I had originally hoped the artists would help triangulate my research, but due to limited time and availability I relied on information from the Visual Arts Center and other institutions associated with Lead Pencil Studio for final verification.

My methodology specifically focused on how to construct my fieldwork, yet as I built my analysis, I found significance in the artists' history and background. By learning about their past I was able to better understand the narratives that I observed in the studio.

In the following chapter I further explore Lead Pencil Studio's career in order to contextualize their work at The University of Texas at Austin where I conducted my research.

CHAPTER 4: MEET LEAD PENCIL STUDIO

Introduction

Before discussing my observations and interviews with Lead Pencil Studio, I want to use this chapter to present the Lead Pencil artists[1], Annie Han and Daniel Mihalyo. Going along with my belief that research should present context about its participants, I compiled a comprehensive description of the artists' past as a way to understand their present actions at the Visual Arts Center.

In order to discuss the artists' past, I had to examine the multiple perspectives from which I could create context. First, I started at the most available resource, the artists' website. Here the artists curate their own description, choosing how they want the public to view them. Next there were the online articles written by critics and journalists in the art community. And, finally there were my interviews with the artists, where I focused the inquiry toward contextual information that was relevant to my research question. These perspectives all provided different voices, but I felt like they were necessary to achieve balance in my narrative.

In organizing this chapter, I broke it into four parts starting with how and when the artists met, a description of their working philosophy, examples of their past work, and finally a description of themes as related to a description of *Diffuse Reflection Lab*. I felt like it was best to describe the VAC installation in this chapter before I then described how the artists used research to accomplish the final work.

[1] In my research methodology I referred to the members of Lead Pencil Studio as artist-participants but from here on forward I will use more informal names like "Lead Pencil," "the artists" or "Daniel and Annie" in order to build my narrative.

A History of Lead Pencil Studio

The most pronounced thing I noticed about Daniel and Annie was how they so comfortably worked together as a collaborative unit. While they are a married couple, I believe the artists' success as a collaborative is due to their professional attitude, which extends past their personal relationship. Near the end of my observations, Annie and Daniel described their process as one that counts on questioning, which creates an environment that is safe enough to be frank and oftentimes resistive towards the other person's opinion. After fifteen years of collaboration, the two artists' seem so cohesive that even in their disagreements I struggled to see dissonance. One thing I want to emphasize about the artists is that their process is seamlessly one; in this point of their career they do *everything* together, even their sketches. For me, a big question was – how did Lead Pencil Studio start as individual artists and end up as a collaborative? To understand this question, I will describe each artist's background before they met.

Annie Han was born in South Korea but immigrated to the United States when she was fifteen. Unlike in Korea where her artistic talents were overlooked, Annie's eighth grade teacher immediately took to her, picking her out of the class and encouraging her to create artwork (Beete, 2011). Annie went to high school in Portland, Oregon and attended the University of Oregon in Eugene. Her parents had pushed her to choose a practical college major, which meant she started in journalism but Annie describes that path saying, "I practically flunked out of journalism school the first year" (Beete, 2011). Annie then decided to pursue her interest in art and became an architecture major.

Daniel Mihalyo, a native to Seattle, Washington, describes his education in art saying, "The public school system had really good art teachers all along. I took a lot of

art and theater and drafting and design classes" (Beete, 2011). Daniel first attended Western Washington University where he was taught under the guidance of Japanese sculptor, Katsumi Murakami. Daniel spent a summer working for Murakami in Japan, and after taking some time off he transferred to the University of Oregon to pursue a degree in architecture (Beete, 2011).

At the University of Oregon, Annie described how she and Daniel had separate studio practices. Annie stated, "While we were in school we had our own studios and our own projects and we were taking our own classes so it was very much an independent thing." [2] Annie is three years older than Daniel so in an interview with the University of Oregon, Daniel pointed out how originally Annie was his studio critic. A unique aspect to the University of Oregon's architecture program is that they have a dual emphasis on art and architecture. Daniel and Annie were each drawn to the art aspect of the program, which Annie described as being "a little bit unusual or maybe a little different from others," but it was that interest that brought them together. At this point, Daniel and Annie began to collaborate. Annie described how their busy school schedules led them to socialize more as they helped each other on weekends and evenings. But at this point their work was still separate. Annie said,

> He was helping me out for a couple of days making something and finishing something, and I was doing the same thing so there was a little bit of a back and forth, helping each other out but I don't think that was any different than any other students going through the same thing.

Upon graduating in the early 1990s, Daniel (BArch '94) and Annie (BArch '93) both interned at an architectural firm in Seattle, Washington. The firm was typical to most big or medium sized offices and both of them felt like they wanted to break out of

[2] In this chapter, all quotes with the artists are taken from the researcher's personal communication with Daniel Mihalyo and Annie Han on January 12, 2013, unless otherwise noted.

that environment and start their own office. Annie saw the break as "sort of out of default because we felt like the office life that architecture had to offer was a little different than what we imagined and we wanted to do it a little differently." In 1997, Daniel and Annie created their architecture firm, Lead Pencil Studio. While they were mainly doing architectural projects, the two had a separate art studio that was within a half block from the office. At that point Daniel and Annie still had separate desks and they were doing independent projects. Annie says the separation was due to her belief that "art is so personal."

In 2002, there was a call for an art show that specifically requested work from people who were trained in architecture but were producing artwork. The call appealed to Daniel and Annie, who realized that description aligned with their practice. This was the first time the two worked together to conceptualize and create an art project. Annie described the collaboration saying,

> It was a little bit difficult because we had never done that before. We always did, 'this is my project you're helping me' and 'this is your project I'm helping you,' but we were conceptualizing and building it all together. And the result was really a piece that changed everything for us.

After that experience, Daniel and Annie started working together on everything, whether it was architecture, photography, drawing or sculpture.

In the transition from working as individuals to working as a collaborative team, the duo created ground rules on how they would work and communicate. Coming from a field that already encourages collaboration, Daniel and Annie were not new to the concept but they had to redefine the more rational, client-based type of group work they had experienced in architecture. Daniel believed that working together was difficult because they were coming from the same discipline, which Daniel described by saying, "We look at the same things, we see the same things, we study the same kind of things,

so we have to resolve aesthetic and personal differences together as we move forward on any project." Ultimately, the greatest difficulty in becoming a collaborative was not about how they worked together, but it was how they learned to resolve their differences. Daniel describes this struggle saying, "[there was] the difficulty of learning how to resolve really aesthetic differences, which are not rational." Unlike architecture where "decisions are rational," the client is "the umpire" and decisions are "functional," Daniel and Annie's artwork was based upon a personal, "non-functional" rationale.

One helpful rule that guides Daniel and Annie past their personal rationales is that they start each project with a completely blank slate, instead of comparing ideas that are individually conceived (Beete, 2011). Annie explained this process saying, "We [ask] what are some words and things that come to our minds, and we write those things down. Then we go through our archives of research we've done, photographs we've taken…and then we start developing ideas" (Beete, 2011). While this approach allows Annie and Daniel to come together, it does not occur without argument. Daniel described their process as one that came from their mutual harsh criticism:

> We're so used to critiquing stuff and basically bad mouthing a lot of things… so we were like why don't we turn that against each other. So we use that a lot. We have a fairly argumentative process, like constantly criticizing or shooting each other down before an idea gets rolling too far and it ends up getting much better. I think somehow, even though its often adversarial, we're happy with the results so we continue to collaborate on projects of all scales large and small. (personal communication, January 29, 2013)

The conversation that Daniel described occurs at the beginning of their process before an idea takes form. I believe criticism challenges them to truly commit to an idea because it must be argued for and then mutually agreed upon.

After that 2002 project, Daniel and Annie continued to work as architects although their studio practice took on a more significant role and their resume as Lead

Pencil Studio, the *artist* collaborative, rapidly grew. While their commercial practice as architects continues as a separate entity, I believe Annie and Daniel have created an overall philosophy towards space that permeates through their commercial and artistic work. I further describe this philosophical approach, which they have termed "spatial inquiry," in the next section before delving into specific examples of their previous work.

Spatial Inquiry: Transcending Architecture and Art

In an attempt to better understand Lead Pencil Studio's work, people often ask Daniel and Annie whether their work identifies more with architecture or art. Annie described their artwork saying it has "a very recognizable, identifiable, sort of architectural gesture." Having to deal with this question of identity and place so often, the artists created the term "spatial inquiry" to describe their artistic mission. The artists define spatial inquiry in a statement for the VAC saying it is much like the terms used by "Matta-Clark's Anarchitecture, Krauss's Axiomatic Structures and Debord's Psychogeography," which all take place "between art and architecture" (personal communication, Spring 2011). From my observations and research, I have defined spatial inquiry as a rigorous artistic investigation of physical and psychological space as we experience it through our daily surroundings.

In *The Architectural Record* Annie told the journalist, "We're often told, 'you can't do both,' but architecture and art are completely inseparable to us" (Greenberg, 2005). While their practice has merged two disciplines, the artists still identify differences between the fields, selecting traits from each one in order to create the best practice. In the *National Endowment for the Arts Magazine*, Daniel discussed how their fine arts practice moves past the rigidity of architecture, allowing them to explore space more abstractly (Beete, 2011). Meanwhile, the artists still rely on architectural language

and technique to create their work, using tools like architectural floor plans to strategize their installations. In an alumni review from the University of Oregon, Lead Pencil Studio's practice is described as one that "explores the intangible conditions of architecture at full scale" (Johnson, 2007, p. 20). Their art installations are never meant to serve as architectural works, but rather they use architectural language to create artwork that provides commentary on our built environments. In an artist statement emailed to the VAC, Lead Pencil stated that they do not want to "arrive at finite conclusions" about architecture, rather they want to explore its behavioral and emotional influences that affect us (personal communication, Spring 2011).

Lead Pencil Studio not only examines the "intangible conditions" of architecture, but they also "stake a critical position" in their work, oftentimes exploring the political, historic and social implications of their site-specific work (personal communication, Spring 2011). Seattle-based journalist Jen Graves serves as a key critic of Lead Pencil and described their work in *The Stranger* saying, "Their forms are oblique enough to produce new narratives, and rooted enough in history and location to refresh old ones" (2006). Lead Pencil Studio's works are site-specific, meaning they research the location of their installation and then propose a possible narrative that would come from its existent history. Their work blends fact with fiction, allowing the audience to be part of the past while also exploring a possible present (Mudede, 2005). Through their research of political, social and physical history, Lead Pencil makes "spatial inquiry" even more complex, because it moves beyond architecture and art towards an exploration of time.

Past Works: 2002 – 2012

While I worked alongside Daniel and Annie I was amazed by their busy schedule. This was my first time really interacting with professional artists and I had not realized

the amount of juggling one had to perform in order to keep multiple projects in motion. Lead Pencil's extensive resume, which extends back to 2002, definitely reflects their multi-tasking. In looking over the past ten years of their work, I decided to highlight a few examples that demonstrate their major ideas and to also explore how those works led to the creation of *Diffuse Reflection Lab*.

At the beginning of their practice, Daniel and Annie made metal structures that sat on tabletops, but Daniel felt unsatisfied saying, "We were looking at those forms, we were always thinking about the space within. We just wanted to be inside, so we began scaling up" (Rich, 2006, p. 68). *Inversion* (2002), the first work that Lead Pencil created as a collaborative, speaks to their early tension with scale (Figure 3). The piece was a welded wire sculpture that hung on a wall, which Annie describes as "a five foot cube of a spatial enclosure" (personal communication, January 29, 2013). The artists wanted to think of architecture not as solid walls that enclose a space, but an atmosphere where void exists (personal communication, January 29, 2013). The sculpture relied on the linear quality of wire, creating the illusion of drawn lines. While this work was smaller in scale and stayed relatively two-dimensional, the ideas and material used in this work served as a conceptual precursor to later works like *Stair, Maryhill Double, Non-Sign II* and *Inversion* (2012). This work was a first step towards future large-scale installations, which placed the audience inside the void, enabling them to physically explore the space by walking through, around or within the work.

While Lead Pencil's artwork began on tabletops, their experience in architecture had already familiarized them with large-scale productions. Prior to their work with *Inversion* (2002), Daniel and Annie had firsthand experience building a home from the ground-up, which is known as *Four Parts House* (Figure 5). Unlike the typical architect, who takes a more removed approach in the construction of their work, the artists took an

abandoned lot near downtown Seattle and transformed the neighborhood's informal dump into their home (Holstein, 2004). On a daily basis for seven months, Daniel and Annie were the manual labor, experiencing the physical extent of constructing a building. Their work showed an innovative approach to architecture where "studio and home intermingle without tangling" (Rich, 2006, p. 68). The home attracted attention for its sustainable design and low material cost, but also for how the architects had envisioned an open space that combines functionality with art. While Lead Pencil does not include their home in their art resume, I believe the work enabled the artists to imagine art on a building-sized scale and gain firsthand experience in that extensive type of production.

Before describing Lead Pencil's more established artworks, I will go backwards to describe some inspirational work, an ongoing photography project that began while the artists were studying at the University of Oregon. Photography is a significant component of Daniel and Annie's work, and while it has been displayed less frequently it still remains key to their process and research. For the past twenty years, Daniel and Annie have explored the Pacific Northwest, taking road trips to photograph the natural and manufactured landscape. This investigation first began as a college project. Daniel was examining sawmills in the Pacific Northwest, spanning from Alaska to California and east to Montana. The project documented the architecture of sawmills, specifically focusing on one particular building type known as the wood burner. Annie accompanied Daniel on his trips and notes the impact of this project on their perception of space, remembering the beauty of these spatial enclosures that were isolated in an abandoned landscape (personal communication, January 29, 2013). The project evolved and the artists also began to document concrete foundations, which marked where mills had been torn down or burned. The abandoned foundations were ghostly and left questions unanswered for the artists, spurring their artistic research for many years.

In 2002, the artists were accepted into the Center for Land Use Interpretation Residency program in Wendover, Utah – a one-month residency that occurs in total isolation in the Utah desert. Daniel described the experience saying, "We toured the Great Salt Lake basin and looked at foundations and construction … this began another opportunity for us to start looking at these objects sculpturally" (personal communication, January 29, 2013). Lead Pencil's photographs led them to question the role of built environments in the landscape, but as their work progressed, drawings and documentation seemed insufficient and the artists turned to sculpture and installation to resolve this inquiry.

In 2003, Lead Pencil was commissioned by the Sand Point Arts & Cultural Exchange to create *Stair*, a site-specific work at an old naval base in Seattle, Washington (Figure 4). Reflecting upon their previous work with the welded wire in *Inversion* (2002), Lead Pencil realized that they could make a large structure that was still very lightweight. They proposed to weld wire and create a discontinued stairwell that visually connected the hose tower of the fire station to a building that had burned down right across the alley (personal communication, January 29, 2013). The structure reveals the sky within each step, making the work appear as though it were levitating. While viewers were prohibited from walking up the stairs, Annie did walk on the sculpture to prove its strength and balance. The 18 lb. structure not only showed a huge shift in scale, but it also signified a development in concept because it proved to the artists that they could use small gestures to create a large visual impact.

In 2004, Lead Pencil continued to work with the linear qualities seen in their welded work, changing the material to string for a site-specific installation. This ethereal material played with the light of the gallery space while also creating a sense of false enclosure. *Linear Plenum* used thousands of green and white strings, which were strung

from floor to ceiling, filling the entire main gallery of Suyama Space in Seattle, Washington (Figure 8). For this work Annie described their thought process saying they did not want to make an object for the space rather they wanted to make a comment about the space itself. Annie went on to say,

> We spent two weeks observing the light condition in the space. There was skylights, so the light really moves around [and] so we decided we wanted to do a three-dimensional diagram of what the space looked like … where the ducts are and the skylights are we left the space empty to navigate through those voids. Otherwise it was totally filled with strings. (personal communication, January 29, 2013)

One critic described how *Linear Plenum* "reminds you that the room is both gallery and hallway, a space dedicated both to transition and to lingering, and by making it both empty and full, the artists preserve the paradox" (Hall, 2004). Like most of their work, the artists did not leave instructions on what the viewer could do. For this work they were lucky enough to see the public interact with their work, describing how "some people would only walk through the void areas and others would plow right through the middle of the space" (A. Han, personal communication, January 29, 2013). In this piece, their process went from creating an object to place within the space, to observing the space and then creating an object in relation to it. This transition is an important change, showing their interest in a space's physical and social history.

In 2006, Lead Pencil received their first major grant from Creative Capital, which enabled them to work on *Maryhill Double* – a monumental copy of the Maryhill Museum, located on the edge of the Columbia River Gorge in Oregon (Figure 6 – Figure 7). This work was an intensive exploration of history and interior spaces where the artists worked to emulate the museum using metal scaffolding and construction netting. The Maryhill Museum, which has been called "Castle Nowhere," was a private residence built in the early 1900s by Sam Hill, an eccentric, East Coast entrepreneur who envisioned his

estate as a future Quaker farming village that would emulate the English countryside (Graves, 2006/2007). Unfortunately, Hill's dream was never realized and his family was so dysfunctional that no one ever lived in the house. Rather, the site became a museum, which *Time Magazine* described as "the world's most isolated art museum" (Graves, 2006/2007).

The artists first encountered Maryhill Museum in one of their drives through Oregon, where they were struck by the building's location amongst such a barren landscape (personal communication, January 29, 2013). Through metal scaffolding and construction netting, they copied the layout of Maryhill and even allowed visitors to climb the scaffolding so to access views of the landscape. The work sat across the river gorge opposite from the museum's site, calling for their transparency to serve as a commentary on Hill's vision. The installation took three years to build and existed for three months. When all was said and done, the artists destroyed the piece in three days, going back later to see how the land slowly erased the evidence of foot traffic and scaffolding imprints. This work not only dealt with the temporality of built environments, but with the role that landscape plays in our perception of architecture.

Moving from the effects of the landscape, another theme that Lead Pencil explores is the effect of light on architecture. In 2007, their work was featured in the Lawrimore Project, a Seattle gallery that represents them (which they also redesigned as architects). *Arrival at 2 AM* was one of their featured works (Figure 9). In a description of the work, Annie states, "We were doing studies of the exteriors of light coming into a space [so] this piece is about artificial lights escaping outside the window" (personal communication, January 29, 2013). The gallery did not have any windows or skylights and the artists wanted to capture an image of the moonlight emanating into the gallery. They calculated the angle of the moon and how its light would emerge through an

imaginary window, creating "two reflective windows with light-blue strings that stretch to steel plates fixed on the floor as though the strings were beams of light coming through the windows and falling on the floor" (Graves, 2007). Jen Graves describes *Arrival at 2 AM* when she wrote, "I never thought I'd see fairy-tale minimalism. But this is what Han and Mihalyo do in all their work: stage a never-ending debate between the standardized-industrial and individual-totemic lives of built environments and their parts . . ." (Graves, 2007). The work made light the focal point of a space, where typically the light is a means to an end.

In *Arrival at 2 AM*, the artists also relied on an imagined narrative to explore the fine line between fact and fiction. The moonlight becomes a fictional quality to the windowless space, despite the factual information the artists used to create the angle and intensity of the light. The artists' exploration of narrative reaches back to *Maryhill Double* and another major work seen at the Henry Art Gallery in Seattle, titled *Minus Space.* These works all rely on the history of the space, while the artists create narratives that explore possible variations from that truth. This exploration of fact and fiction became more political in their 2009 work *Retail/Commercial* (Figure 10).

In 2009, Lead Pencil rented a commercial space for two months in the Rainer Square shopping center in downtown Seattle to create *Retail/Commercial*. The 4,300 square foot space was divided into three overlapping sections: big-box retail, not-quite-chic-boutique, and an Italian suit store (to honor what the space once was). They bought retail furniture from liquidation sales and created "a second ceiling made of suspended acoustic-tile grid, Peg-board shelving, sales stickers in screaming colors, empty glass cases, gleaming rows of hangers" (Graves, 2009). The space focused on the fixtures of retail spaces, removing the inventory and therefore the functionality of the space. In *Modern Painters,* Graves commented that, "wandering through was like looking at

dormant life-support machines after the patient has died" (Graves, 2009). *Retail/Commercial* was especially pertinent to the 2008 financial collapse, when many commercial spaces closed leaving behind only the infrastructure and empty space.

Interestingly, *Retail/Commercial* is less documented than other works from Lead Pencil and was overlooked in their artist talk. In my final interview with Daniel and Annie, they described their decision to omit this work from their lecture, because of its obscure and narrow focus (personal communication, February 28, 2013). I chose to highlight this work precisely because of its narrow focus on retail and commercial spaces and I believe it was a major precursor to their exploration in *Diffuse Reflection Lab*.

Up to this point Lead Pencil's thematic explorations may seem at odds. On one hand, they have sometimes attempted to remove objects from a space, using site-specific installations to explore the ethereal qualities of a space. While on the other hand, they sometimes emphasized objects in a space, exploring how they manipulate our perception of space. Ultimately, Lead Pencil's "spatial inquiry" looks at space and objects, identifying how they are interrelated.

Having worked within the space of the gallery, the artists shifted their focus to the object in *Without Room* (Figure 11) an installation they did in 2008 in Greensboro, North Carolina at the Weatherspoon Art Museum. For this installation the artists requested that a student from the community step forward to allow the artists and the museum to document his/her apartment. A female student volunteered her apartment, which she had lived in for ten years after graduating from college. The artists note that the space "was obviously too small for all the possessions that she owned" (D. Mihalyo, personal communication, January 29, 2013). From this space the museum documented and measured everything, meaning that the artists never actually visited the apartment. Their installation worked to replicate the woman's apartment based on the museum's

documentation, relying on Goodwill and other salvage sites to recreate her furniture and belongings. Daniel and Annie then painted everything gray to highlight the form of the overall space and how the objects were arranged within the space. The installation became a commentary on how we curate our individual environments and how we all essentially live in a rectangular space, in which our objects define the space. Annie described the installation saying,

> I think once you paint everything and kind of take away the identity of those individual objects and then you look at as a solid… you are capturing the negative space and capturing the void and in order for you to do that you have to absolutely study the solid. (personal communication, January 29, 2013)

Without Room shows how the artists could just as easily use objects to comment about space itself, but this idea also introduced them to a theme that explored how they could use technology to document space and objects.

Starting in 2008 and then again in 2010, the artists' observation of objects in space became especially focused with the aid of LIDAR scanning technology. The artists first learned about LIDAR (Laser Infrared Detection and Ranging) ten years ago when the Department of Transportation was using it to scan topography in Seattle, Washington. The technology basically performs light metering and can gauge the distance of objects, creating a three-dimensional scan. It was developed for the petroleum mining industry to map difficult spaces and figure out where to put new pipes, but it has become more widespread in its use. The artists knew they could never afford to buy this technology, so they proposed a grant for the Rome Prize that would allow them to use it (personal communication, January 29, 2013). In 2008, the artists received the Founders Rome Prize from the American Academy in Rome. With this award, they were able to partner with Leica, the creators of the LIDAR technology, and examine the negative space in Rome.

The artists' time in Rome exposed them to the technology, and then in 2010 Lead Pencil received the New York Prize at the Van Alen Institute. The fellowship granted them access to updated technology so they could scan parts of New York City (Figure 12). For three months the artists scanned as much of the New York City cityscape as possible, creating a large portfolio of material that they could access later. They were able to scan locations like Times Square, Wall Street, and the Stock Exchange. But besides famous New York spots, the artists also scanned many ordinary structures, taking note of how we perceive cityscapes (Figure 13). They dissected images, identifying hidden spaces within buildings as well as the role of extraneous objects like awnings and signage (personal communication, January 29, 2013). Another major observation that came from this exploration was the role of reflective surfaces in the cityscape. Since the scanning technology relied on light to gauge distance in space, the artists noticed odd readings when surfaces were highly reflective. As they collected raw data, they were unveiling possible themes that would then direct their future work.

In 2012, Lead Pencil pursued one theme noted in their LIDAR work, creating *City Surface* at MassArt in Boston, Massachusetts (Figure 14 – Figure 15). A description from the gallery read,

> The artists found inspiration in Boston's dynamic signage and eclectic facades, which form an intricate language of non-architecture that is superimposed on the city's buildings. Relocating the quotidian elements of an exterior streetscape for reinterpretation within the gallery allows viewers to experience the everyday in a fresh and unexpected way. (MassArt Bakalar & Paine Galleries, 2012)

Lead Pencil used plywood to recreate the extraneous objects, transforming their initial LIDAR research into a sculptural installation. While this work explored one tangent from their scanned research, the artists were also interested in the reflective qualities of the city and were just simply waiting for the right opportunity to explore it.

Diffuse Reflection Lab

In *Diffuse Reflection Lab,* Daniel and Annie had finally found the right opportunity to explore their interest in reflection. While reflection had been a theme that arose in their LIDAR research, the artists had been playing with this idea for over ten years through their photography and video work (Figure 16). When I began my observations, I was interested in how the artists' previous work would affect the projection for their on-site work. In order to understand those influences I looked at the architectural floorplans that Daniel and Annie sent to the VAC before arriving (Figure 17 – Figure 18). In the following section I go through each component of *Diffuse Reflection Lab* and draw connections from Lead Pencil's previous work in order to show how the artists have continued certain themes as ongoing pursuits in their career.

Description of *Diffuse Reflection Lab*

Diffuse Reflection Lab was a two-story plywood building in the middle of the Vaulted Gallery (Figure 19 – Figure 21). While it had the construction and form of a building it could just as easily be considered a sculpture. The structure served as an armature for a variety of vignettes, which all explored the idea of reflection. Some of the vignettes exaggerated ideas, which are usually subtle in our environment; others were only noticeable once the viewer took a more examined look. Many vignettes relied on reflective surfaces or finishes to show reflection, but other areas used photographs, which displayed reflections that occur within the gallery space. The piece explored a total of six vignettes, which all had different character traits.

On the first floor there was one accessible scenario and then four display-only scenarios. The accessible room on the north side of the armature was a café scenario with a table and chair environment (Figure 22). The café opened up towards the

courtyard light and featured display cases and a rack of magazines (Figure 23), which also alluded to ideas in reflection. Adjacent to the café on the eastern wall were two vignettes. The first was a small window display case, and further south next to it was a similar storefront display that referenced an old electronics shop (Figure 24). The display case was empty, playing more with the reflective materials and showing the abandoned aspect of commercial spaces (Figure 25). The electronics shop display featured stacked televisions, which screened videos of more nuanced interpretations of reflection (Figure 26). On the southern facing wall, opposite the café, there was a staircase and then a storage space where a video projection played footage of reflection the artists had recorded (Figure 27). The final vignette on the first floor faced west toward the gallery's front-facing wall, showing a replica of the main entrance. The replica used high-definition, large-scale photos taken from a gigapan camera. The photos documented the reflection of the gallery's glass front entrance, bringing awareness to the space while also confusing the viewer (Figure 28 – Figure 29).

Up the stairs to the second floor was an office space situated directly above the café. The office was not accessible but was still viewable from the top of the stairs (Figure 30) or from the mezzanine level of the gallery (Figure 31 – Figure 32). The second floor was staggered from the mezzanine level of the gallery, meaning viewers could look down into the structure. While none of these rooms actually functioned, they were full of materials that implied the possible function of the space. Unlike Lead Pencil's previous work, this structure did not focus on a particular room or a single stand-alone object, so things were occurring simultaneously within the space (personal communication, January 9, 2013).

Past Themes Present in *Diffuse Reflection Lab*

Within these vignettes there were many allusions to previous work. The exploration of light, space and technology emerged as prominent themes in the construction. As seen in how the overall structure was aligned, the café and main entrance wall were dependent on the natural light of the space, where the vignettes played reflection through the use of photography and the use of materials like glossy paint and glass paneling. As seen previously in *Linear Plenum*, the artists capitalized on the natural light within a gallery space, making sure the structure interacts with the pre-existing features.

The use of video projections was a key use of technology and was utilized in the storage space, the electronics shop, and the office space, all adding an extra layer of narrative to the already established spaces. The use of video work and film is relatively new to the artists, although they had recently experimented with that idea in the Scottsdale Museum of Art in 2012. This use of video has also been common in their documentation of pieces, which they relied on when displaying their experience with *Maryhill Double* and their work with the Van Alen Institute in New York City when they worked with the LIDAR technology.

As seen in the overall idea of *Diffuse Reflection Lab* the artists applied ideas and scenarios to each vignette, using common every day objects so that the viewer could imagine themselves within the space and make associations to the work based on their own lives. This use of a quotidian narrative is challenged by the overall uselessness of the space. This challenge to everyday narratives existed in other previous works like *Retail/Commercial* and *Without Room.*

Also, the artists' research, which was presented in a "course reader," examined various facets within reflection and how its history has affected architecture. This

interest in history was previously employed in the artists' research of *Stair*, *Maryhill Double*, and *Minus Space.* Although, unlike previous work that focused on the history of the physical space, the course reader extends the artists' review of history to a concept, specifically reflection.

Final Comments: The Role of Criticism

Before moving to the next chapter, I want to discuss the articles I used to discuss Lead Pencil's previous work. Overall, the artists' works have been written about in Seattle-based publications, which have been mostly descriptive in nature. Of the thirty-some articles I read, only two gave negative reviews. While I believe the artists' work is interesting and worthy of positive reviews, I am actually bothered by the scarcity of critical conversation. As Graeme Sullivan (2005) discusses in *Art Practice as Research: Inquiry in the Visual Arts*, the art critic plays an important role in creating meaning for practice-based research. While I believe criticism is a necessary component to art, I do not see this thesis as the appropriate platform for criticism. Rather, I want the reader to be aware of what I believe is a one-sided representation.

In my first interview with the artists we discussed art criticism and its diminishing role in contemporary art. The artists have discussed how they internally critique their work, but I believe the lack of outside criticism limits their potential growth. A proper criticism would place the artists' work amongst a broader intellectual community and try to make meaning within that context. In the next chapter I describe how the artists provided context for their work at the VAC, therefore enabling members of the public to become their own art critics.

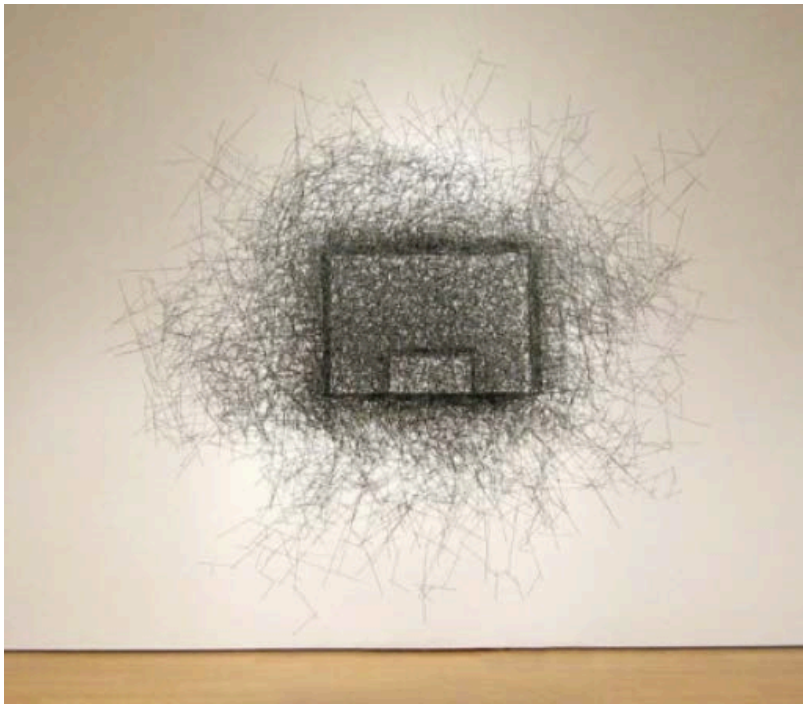


Figure 3: *Inversion*, 2002

Figure 4: *Stair*, 2003

Figure 5: *Four Parts House*, 2001

Figure 6: *Maryhill Double* (Columbia River Gorge view), 2006

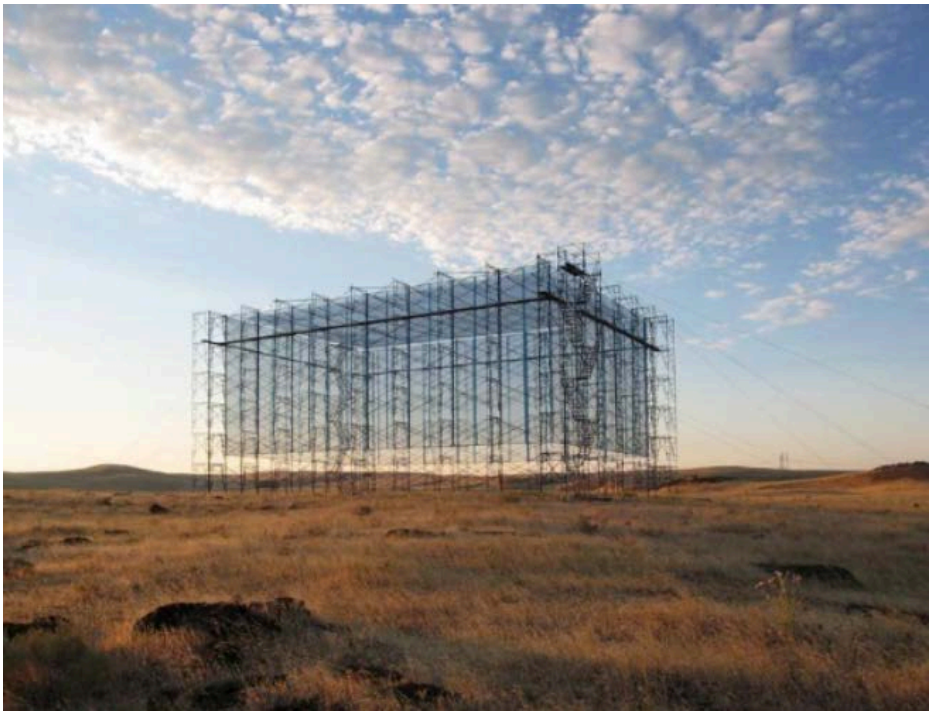


Figure 7: *Maryhill Double*, 2006

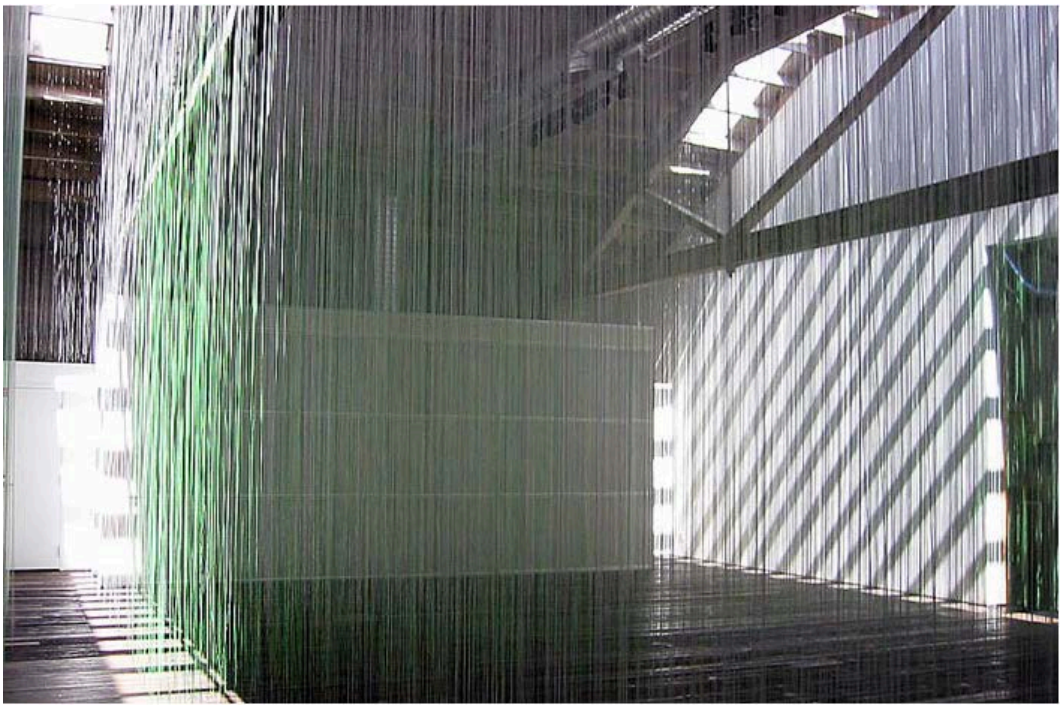


Figure 8: *Linear Plenum*, 2004

Figure 9: *Arrival at 2 AM*, 2007

Figure 10: *Retail/Commercial*, 2009

Figure 11: *Without Room*, 2008

Figure 12: Annie and Daniel using LIDAR in New York City, 2010

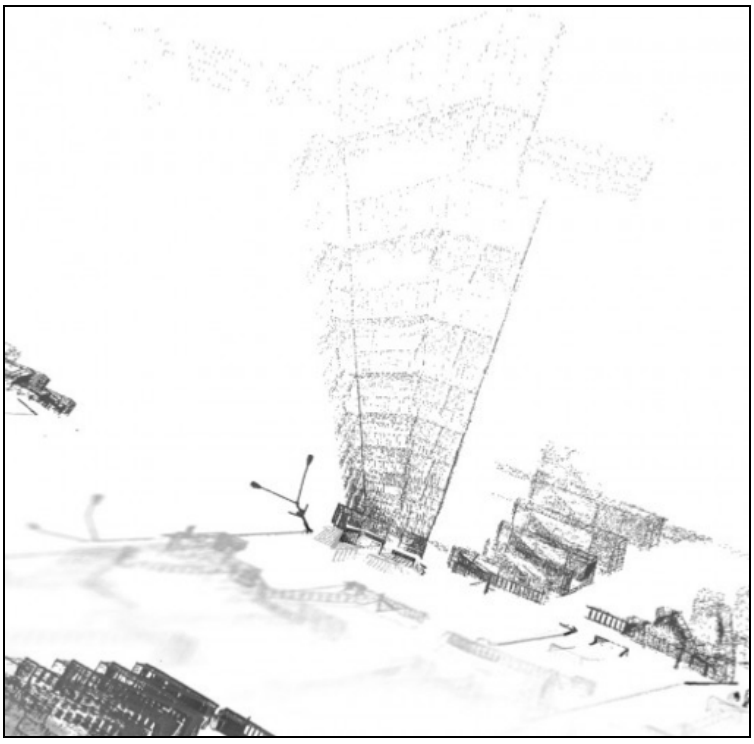


Figure 13: Portion of Cortlandt Alley, LIDAR scan, 2010

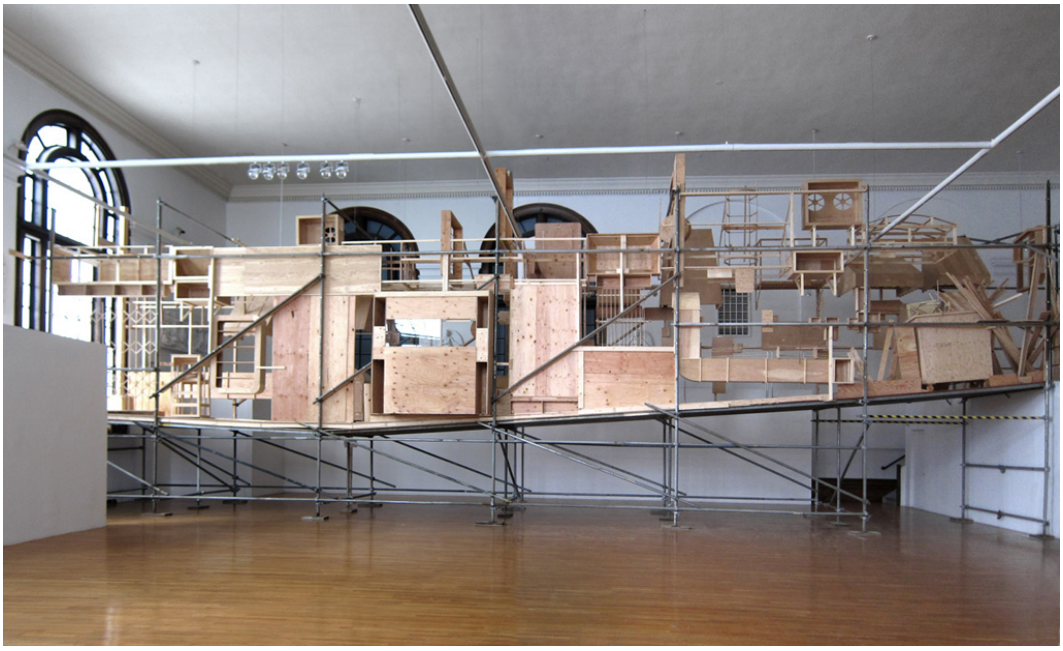


Figure 14: *City Surface*, 2012

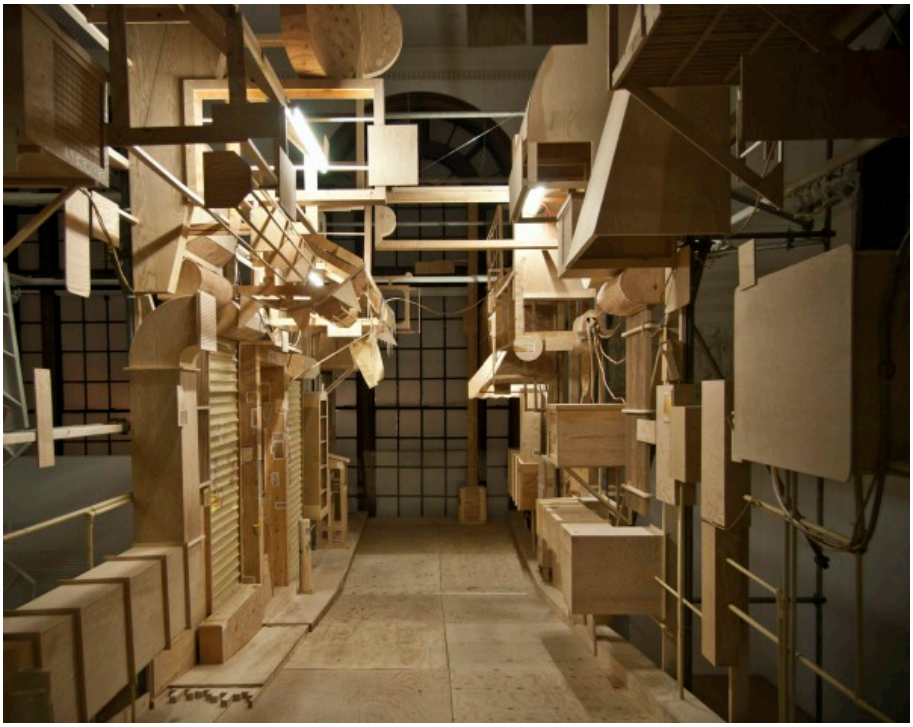


Figure 15: *City Surface* (detail), 2012

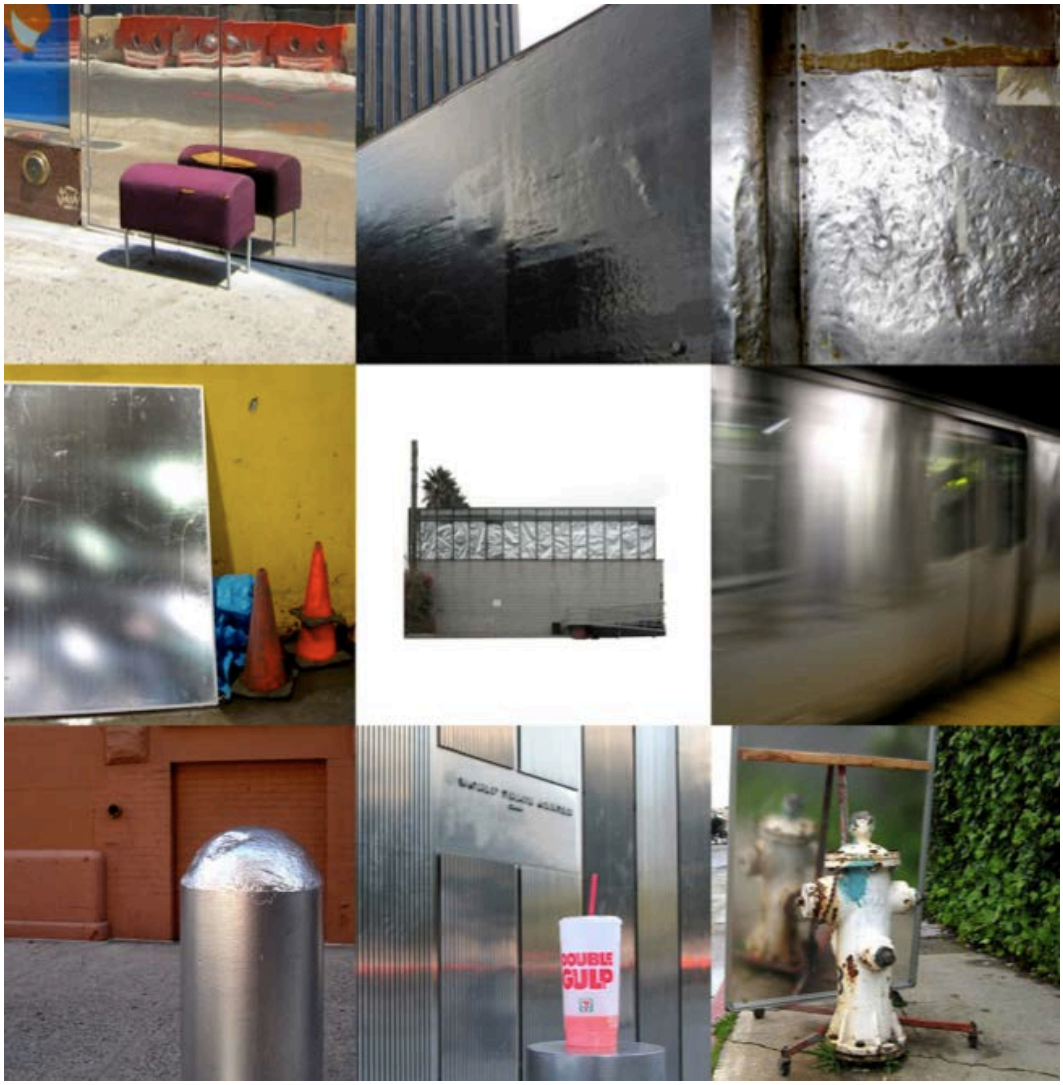


Figure 16: Photographs of Observed Reflection from Lead Pencil Studio's Proposal for the VAC, Spring 2011

Figure 17: Architectural Floorplan of *Diffuse Reflection Lab*

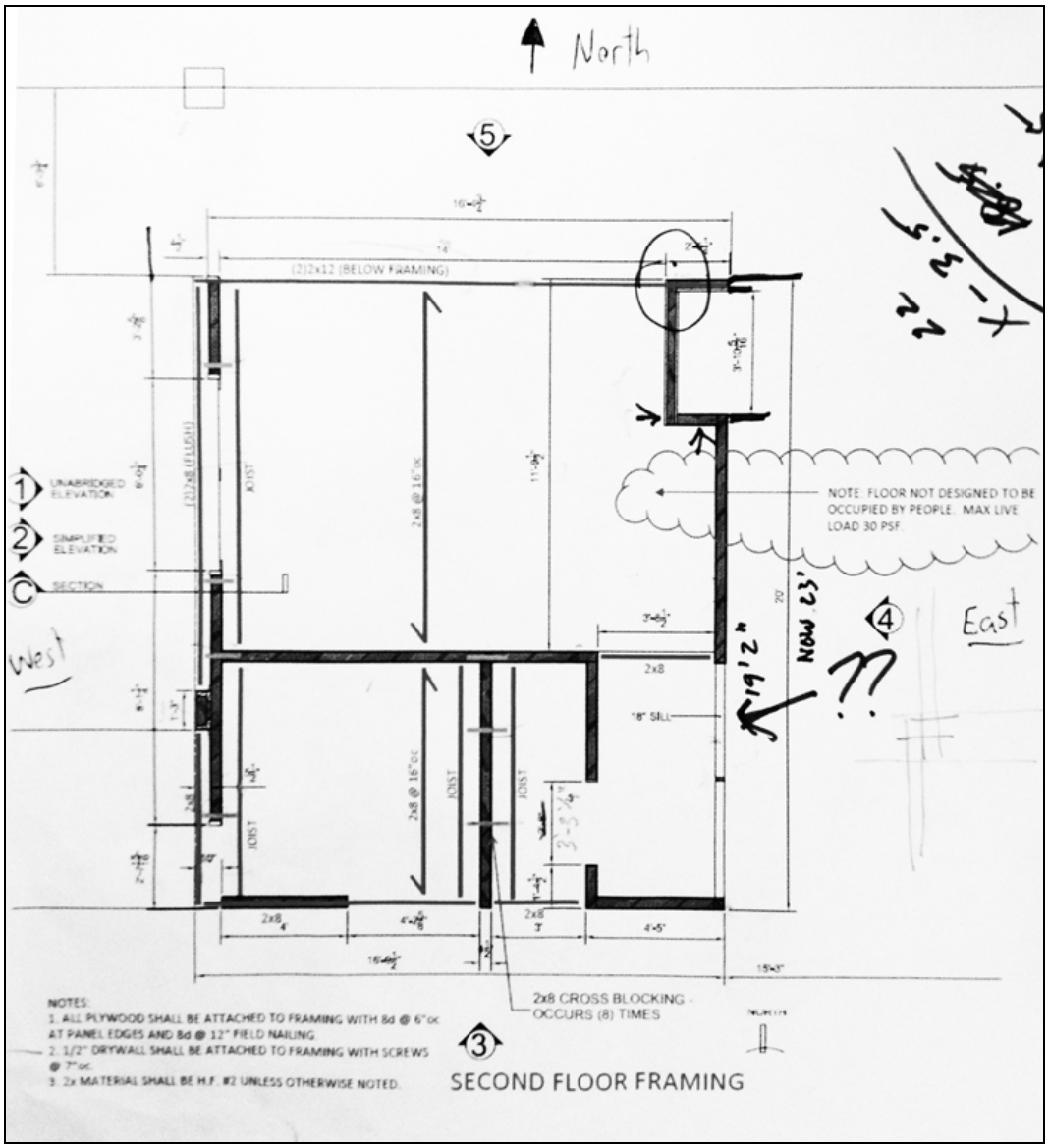


Figure 18: Architectural Floorplan of *Diffuse Reflection Lab* (with notes)

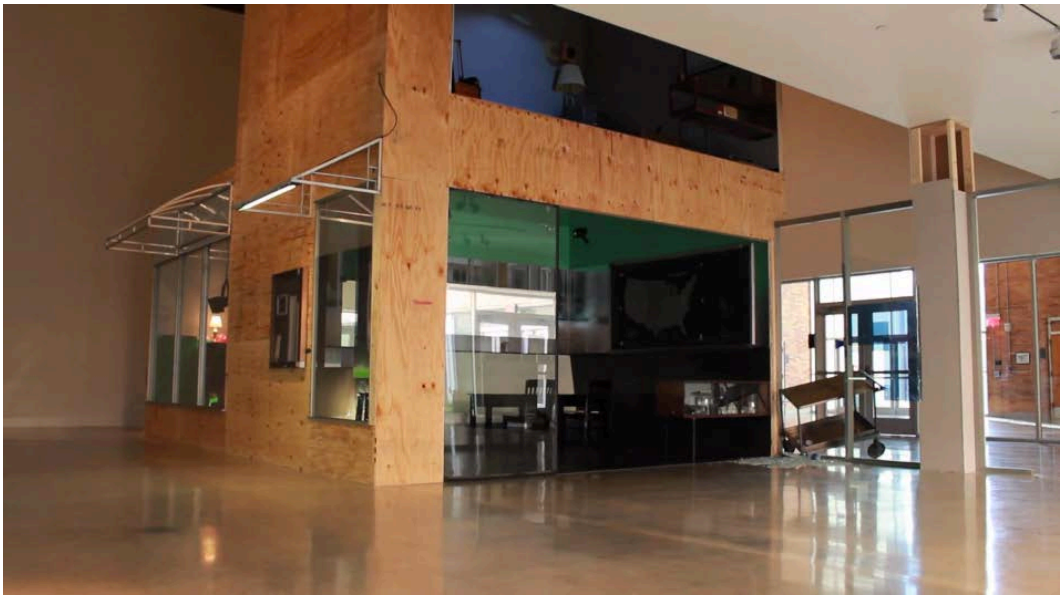


Figure 19: North East View of *Diffuse Reflection Lab*, 2013

Figure 20: North West View of *Diffuse Reflection Lab*, 2013

Figure 21: South East View of *Diffuse Reflection Lab*, 2013

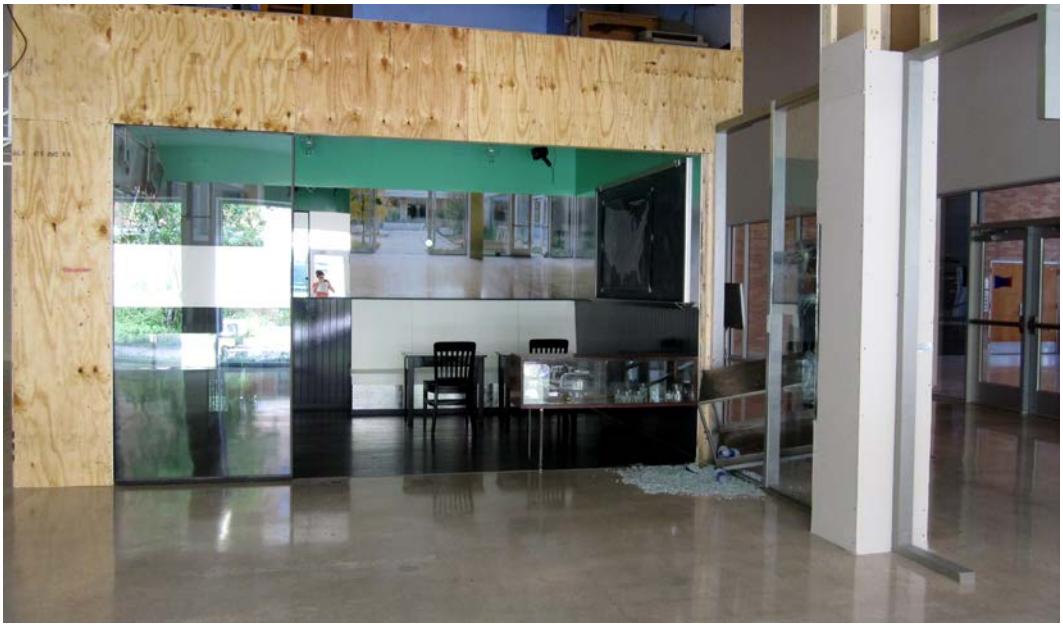


Figure 22: Café in *Diffuse Reflection Lab*, 2013

Figure 23: Café (detail) in *Diffuse Reflection Lab*, 2013

Figure 24: East View of *Diffuse Reflection Lab*, 2013

Figure 25: Empty Display Case in *Diffuse Reflection Lab*, 2013

Figure 26: Electronics Shop in *Diffuse Reflection Lab*, 2013

Figure 27: South View of *Diffuse Reflection Lab*, 2013

Figure 28: Outside View of West Entrance to *Diffuse Reflection Lab*, 2013

Figure 29: Inside View of West Entrance in *Diffuse Reflection Lab*, 2013

Figure 30: Second Floor View from Stairs in *Diffuse Reflection Lab*, 2013

Figure 31: Office, Mezzanine View, *Diffuse Reflection Lab*, 2013

Figure 32: Office, Mezzanine View, *Diffuse Reflection Lab*, 2013

CHAPTER 5: RESEARCH IN THE STUDIO ART PROCESS

Introduction to the Studio Art Process

When I started my research I thought I had a clear understanding of the artistic process. My understanding was based on my undergraduate experience when I created a gallery show for my senior thesis. I must emphasize that my experience was from a *student's* perspective, so while I was creating independently thought out work, I was still shielded from curators, institutions, and other factors that an artist must face when working professionally. Even though I feel like my undergraduate experience started my art career, I now know that my gallery show was a singular investigation that had a constrained beginning and end.

So when I began working with Lead Pencil Studio, I had to re-examine my experiences in comparison to those of Daniel and Annie. In response to our conversations, I came to realize that my definition of the artistic process was similar, but not nearly as developed. I have never written a grant proposal; I have never dealt with a major institution that is financially supporting me; I have never dealt with art critics; and I have never worked with long-term goals in mind; all in all, I have never been part of the professional art world. While I believe my interpretation of the artistic process remains true, I see it as a simpler version, because it overlooks how external forces come into play. So before examining my research question of how artists integrate research into the studio art process, I want to reexamine the artistic process.

In my first interview with Daniel and Annie we discussed the artistic process and its various "stages." That initial conversation led me to continually revisit the topic when I observed Daniel and Annie's process firsthand. In many ways, I believe the artistic process adjusts in response to the artwork, but I believe there is a basic definition from

which each artist works. In the following section, I define the artistic process according to my experience with Lead Pencil Studio and their work on *Diffuse Reflection Lab*.

Observed Stages in the Artistic Process

As I had previously stated in my research methodology, I noticed three stages in the artistic process: the planning stage, the execution stage, and the presentation stage. Since my thesis is mainly concerned with how practice-based research figures into a more traditional world of qualitative research, I realized that my defined stages also parallel qualitative research. As I was observing the artists I attempted to relate their work to the more defined stages of qualitative research where there is an assumed beginning and end with more definition. While I found traits that defined these stages, my conversation with the artists revealed a more nuanced process.

To mark the beginning of the planning stage, I believe the artists must have an idea that they want to pursue. The defining idea behind the artwork can come from prolonged observations or a catalyst moment, but from that moment, a research question (whether explicit or implicit) is formed and the artists begin to engage in preliminary research to further expand and formulate their investigation.

In the planning stage the artists' investigation can take many forms, although I believe much of it parallels the planning that occurs in qualitative research. Just the way that I created a literature review, the artists review how their idea has been explored in art history and other relevant fields of thought. As qualitative researchers narrow their focus and decide on a methodology, the artists examine their tools, deciding what materials and genre would best express their idea. In this stage, action is minimal because the process focuses more on an idea's possibility.

In the execution stage, the artists are active in setting their plans in to motion. This stage describes the moment when concept takes form and materials take a more central role in showing the artists' intent. Much like the writing component of qualitative research, this stage relies on a cycle of action, reflection and editing. In this stage the role of the artist must be examined, much like we examine the voice of the researcher. In the execution stage the artists deal with ownership, style and external influences.

In the presentation stage, the idea has become a work of art. At this point the artists must examine the relationship between their conceptual ideas and their physical object, analyzing the transition from process to product. The artwork is then shared with the public and outside interpretation occurs. This stage ideally marks the end of an investigation, where the artist can take the time to synthesize their experience into a written reflection, artist statement, or art lecture. The artists' presentation stage, much like qualitative research, formalizes the work process and allows future researchers, critics or artists to reference this work.

Defining the Unexpected, Cyclical, and Interrelated

The description of these stages are based on my observations of Lead Pencil Studio. But when I explained these stages to Daniel and Annie, they were hesitant about such a structured analysis. Ironically, the major flaw in my description is that I do not account for the unstructured creativity that oftentimes defines art. While I believe Daniel and Annie's practice is structured (especially coming from their architectural practice), I also believe that their artist identity embraces the unexpected and unstructured opportunities that occur in art.

According to Lead Pencil, an idea can appear but take years to form. Annie described how they work through their ideas saying, "Sometimes you want to work on a

project but the ideas are not clear enough… so we keep collecting the thought, talk about it once a while, and then let it sit there" (personal communication, February 28, 2013). In the case of *Diffuse Reflection Lab*, Daniel and Annie had been observing the phenomenon of reflection for over fifteen years. As witnessed in this project, Daniel and Annie had been interested in reflection but they had not found the appropriate opportunity to explore this idea until they saw the natural light in the Vaulted Gallery at the Visual Arts Center. Rather than view the planning stage as an immediate reaction to a new idea, the artists describe the planning stage as an ongoing, research-process that is constant in their studio practice. If the artists' observations are ongoing as they described, then this places the planning stage within a much broader, career-long process.

By broadening their time frame, Lead Pencil's planning stage becomes more of a continuous investigation that also looks to previous works for inspiration. In one comment on their work, Daniel said, "We'll definitely be revisiting this as time goes on… it is going to generate another life beyond just a vague idea" (personal communication, January 12, 2013). In many ways, the research-specific planning stage that I described only occurs once an idea has a home. The more cyclical and ongoing planning stage that the artists described could be more realistically identified as an observation stage.

Interestingly, at the end of my time with the artists, they more freely discussed the planning stage since in many ways they had returned to that stage. This shows that while the stages follow a linear progression, they are also cyclical. Not only do the artists continually repeat the stages with every work they create, but these stages can also happen simultaneously. My observations of *Diffuse Reflection Lab* focused on one project, but while they were working in Austin, the artists worked on multiple works: writing grant proposals, taking conference calls, and conducting material research.

Through the multiplicity and cyclical progression of Lead Pencil's process, the stages blurred together, allowing the stages to become an interrelated process.

The cyclical nature of the stages was also evident in the artists' interpretation of the execution stage. Rather than seeing their actions as final, Daniel stated, "We may end up executing on an idea but it probably isn't the final execution, we'll probably revisit again in another way" (personal communication, January 12, 2013). Although within the execution stage, once Lead Pencil focuses on an idea they are very goal-oriented. Annie described their process saying,

> Coming from an architecture practice and working on a client-budget based project had a stricter process… like, 'you get the description, you have two weeks to do that, gather this, and you do that and do the initial and that's fine.' I'm sure that comes into our process a little bit, but I think with art it's just much more intuitive. (personal communication, January 12, 2013)

In order to strike a balance between a strictly goal-oriented architectural practice and an intuitive art practice, the artists make sure their process is thoughtful.

Contrary to my initial assumptions, the presentation stage did not occur as soon as the work was completed in the execution stage. Since the artists left Austin, I realized that they were working on other projects and it would take time before they could actually sit down and write about their experience with *Diffuse Reflection Lab*, if they ever would at all. Daniel described this slower process when he said,

> That presentation part is what makes [the artwork] more complete – it is that set of ideas that can be verbalized or written that complements the visual component. We are moving more and more towards clarity as time goes on but it isn't… when the show opens. (personal communication, January 12, 2013)

Along with taking an extended amount of time to "complete" the work in the presentation stage, the artists also encourage more flexible interpretations to occur. Oftentimes, the artists adjust their narrative of the artwork to coincide with their latest project or their

audience. When discussing the presentation stage with the artists, I also realized that they placed more emphasis on the audience's interpretation over their own. Rather than explicitly describing their ideas or research, the artists willingly hand over the interpretation to the viewer, allowing alternative narratives to form around the artwork. In our first interview Daniel described this stance when he said,

> We think that if you're making visual artwork the work has to be compelling enough for people to be drawn in to be able to do their own investigation… so I think we try hard not to lay too much out there or tell people what to think. (personal communication, January 12, 2013)

The artists' willingness to omit their narrative of research was the greatest discrepancy between what I expected from the presentation stage and what I found to be real.

In the following sections, I will describe the research that occurred in every stage and how it related to the final work. I have identified major themes within each stage and will also explore how the role of research evolved throughout the studio art process.

Planning Stage: Conceptual Beginnings

Inspiration and Observation

When I started this thesis, I had a vague understanding of what *Diffuse Reflection Lab* would be about. In conversations with friends and family I remember describing a pair of artists who worked with technology to recreate situations where the viewer reflects on their built environment. The first day of meeting the artists, that description changed to how we specifically interact with reflection in our built environment. Through my time with the artists I came to find three narratives that described how they came to focus on the idea of reflection. These divergent narratives also reflect the collaborative, showing how two individuals come together to then create one common

approach. I will start with the individual narratives and then show how they overlapped to create Lead Pencil's unified narrative, which they most often shared with the public.

Annie and her Plastic Bag

In the movie *American Beauty*, there is a famous scene of a plastic bag dancing in the wind where the bag's simple motion captures the viewer and becomes synonymous with the movie's concept of beauty. In an awards ceremony the writer thanked the plastic bag he watched one day in front of the World Trade Center, which had inspired him years before. Annie described this story to me in our final interview because it resonated so much with her own experience. The writer had held onto this memory for years just waiting for the right moment to place it within his work much like Annie had with reflection. In looking back at the origin of *Diffuse Reflection Lab* she described her "plastic bag."

Annie's inspirational moment occurred over fifteen years ago. Back then, in order to break monotony or find inspiration Daniel and Annie oftentimes would get into the car and set off on the road. They usually did not have an agenda or goal in mind, instead the drives were simply an act of diversion that allowed them to find new inspiration away from their studio space. Annie described this practice saying,

> Once in a while we're doing research or looking at photographs… [and] the ideas are coming but it doesn't seem right. And then we do something just totally different… like we'll just drive east towards that direction and see what we can find or what kind of discussions we can have and that's really good for us, for our projects and I find that really refreshing for me anyway. (personal communication, January 12, 2013)

So fifteen years ago, Daniel and Annie took a Sunday drive around Seattle. Early morning Sunday was an especially great time to set out since the city was still asleep and the streets were empty (personal communication, January 12, 2013). One of those days,

Daniel and Annie found an old abandoned warehouse. In their first interview the description unfolded as so,

> Annie: It was one of those places that we came across and it was an old factory or wood-producing place and it was flooded. It was a concrete space and it was flooded… (Trailing off she turns to Dan) Do you remember that place?
>
> Daniel is intently looking at Annie and quietly says mhmm.
>
> Annie: And so it was totally empty…
>
> Daniel interjects: That was in Seattle actually.
>
> Annie: Yea, like columns coming down and the water was flooded and algae has slowly built so it was really green water underneath but it was totally still so when you walked in it was both confusing and confounding like you didn't know where you were and it felt like you were in a film set. (personal communication, January 12, 2013)

Annie, who had slightly intimidated me in our initial interactions, had a very wistful look in her eyes. She was smiling and her eyes widened when she described the experience as one that was a "moment of mystery," and although she wanted to revisit it she knew it no longer existed. All that was left from that experience was a photograph she had taken (Figure 33). This moment caused Annie to focus on the confusion and accidental imagery within reflection, and in that experience she was able to identify their first catalyst moment with reflection.

Daniel's Architectural Observations

Over time, I came to realize that Annie focused more on the emotional (or corporal response) aspects of art making. Meanwhile, Daniel's narrative on reflection was more cerebral. Daniel's inspiration was based in architecture and the history of reflective materials. He described his observations as a "gradual" process, where their photographs and conversations were leading to the "ripening" of their idea when they

wrote the proposal for *Diffuse Reflection Lab* (D. Mihalyo, personal communication, January 12, 2013). Compared to Annie, who described her experience as the type of startling inspirational moment, Daniel's narrative followed a more logical line of thought. He discussed topics like intentional design, which describes when an architect must select materials based on details like granite's polish, paint sheen or a lamp head's reflective hood. Examples of observed intentional design are evident in Figures 34 through 37. Daniel's narrative was more focused on the architectural trade, realizing that reflective details "might confuse, enhance or detract from the space," which then affects a person's overall experience with architecture (personal communication, January 12, 2013).

Overlapping Narratives

When the artists come together to describe their inspiration for *Diffuse Reflection Lab* their narrative focused on photographic observations, an interest in the built environment and finally inspiration from the gallery space itself. Daniel described their use of photography saying,

> We're constantly looking at the world. That's a primary source of where our ideas are coming from, just simple observations of the way that man alters landscape to fit his needs. So that looking and the documentation of that ends up being a lot of photography… (personal communication, January 12, 2013)

Annie described reflection as a "long standing interest that we've been photographing for years and years" (personal communication, January 9, 2013). Besides the flooded warehouse, the artists had been observing and photographing spaces throughout the United States and Europe, noticing how steel and glass are infiltrating our perception of the built environment (Fig. 34 & Fig. 37). From these experiences they began to ask, "how do we perceive space given that reflection is much more prominent?" (A. Han, personal communication, January 9, 2013).

Taking into account that the artists had collected "thousands and thousands of photographs," the artists were waiting for the right moment to translate their observations into a plan of action (D. Mihalyo, personal communication, January 12, 2013). That moment appeared when Jade Walker, director of the VAC, contacted the artists and asked them to write a proposal for an installation in the Vaulted Gallery. In this moment the artists shared a common narrative about the work's inspiration. Besides their photographic observations, the artists' narrative focused on the space itself, which makes *Diffuse Reflection Lab* a site-specific exploration of the Vaulted Gallery. In a press interview the artists said,

> At the VAC, our site visit generated several observations that came to influence the direction of the project, namely the pounding Texas light, interesting reflections at play within the gallery and the shiny newness of downtown against an otherwise modest city fabric. (personal communication, January 29, 2013)

An example of "Texas light" is evident in the VAC Courtyard, where the sun shined towards the northern side of the armature (Figure 36). In the end, the gallery space led the artists to make more site-specific observations and plans, but the space also granted them a home for their other reflection narratives, which had been developing over the past fifteen years.

Preliminary Research

Almost a year passed between when the artists first visited the site to when they were actually building *Diffuse Reflection Lab.* In that time the artists were working on other projects but they were also able to spend time in Seattle to develop their ideas, collect materials and research reflection more in depth. I could argue that the photographs of reflection were preliminary research for this project, but I want to focus

on the artists' more directed research. Their research included a historical, social and cultural examination of literature, film, music and art history.

An interesting aspect to Lead Pencil's research was how Daniel compared their investigation to *Cabinet Magazine.* In a description on its website *Cabinet* states,

> Using essays, interviews, and artist projects to present a wide range of topics in language accessible to the non-specialist, Cabinet is designed to encourage a new culture of curiosity, one that forms the basis both for an ethical engagement with the world as it is and for imagining how it might be otherwise. (O'Toole, n.d.)

In one section of the magazine, the editors choose a theme, which they explore through multiple disciplines in the form of essays, interviews, and art projects. The artists copied this thematic approach in their work, examining the theme of reflection through multiple lenses. In our conversations about the preliminary research I found that Daniel would describe their investigations as possible "chapters" in what would be their book on reflection. Over time, I realized that Daniel and Annie were drawn to the possible stories found in their research, finding narratives amongst a wide range of genres that all pertained to reflection. In the following sections I will highlight a few of those stories.

Readings

While developing their ideas for *Diffuse Reflection Lab*, Daniel and Annie collected written material that explored reflection. The writing included poems and fiction, along with anthropological and historical non-fiction. The readings mostly informed Daniel and Annie's process, so although there were no direct references to the readings in the structure, the readings helped inform the viewer's interpretation of the work. Unlike previous projects, the readings were made public in this show, taking form in a course reader that compiled selections from the readings (sample pages in Appendix C). In an introduction to the reader, the artists wrote, "the reader is intended to give the

art viewing public and students… a general introduction to the basic concepts behind reflection as they occur in the social and constructed environments we experience" (Visual Arts Center, 2013).

Daniel and Annie's research was library-based, meaning they collected all the books they could find that applied to reflection (personal communication, January 12, 2013). Lead Pencil was especially interested in what had "long been a black hole of scholarship on the subject of mirrors," which had recently been addressed in three books and a dissertation (Visual Arts Center, 2013). The readings covered general information like the optics of reflections, the commercial proliferation of reflection in American history and how reflections affect human psychology.

Daniel also discussed the role of reflection in architecture, discussing how reflective materials have become a main component of architectural language. He says,

> We were also looking at different ways that reflection has been introduced. It hasn't always been around architecture. We had matte materials for thousands of years – stone, brick, mortar and it wasn't until relatively recently that we started choosing glass and ceramic and metals. The world has gotten more and more reflective to the point now where almost all surfaces are reflective and there's a desire to make everything very new and very clean. It's very rare that you intentionally put a matte material out into the world because it attracts more dirt and grime. (D. Mihalyo, personal communication, January 29, 2013)

In a way, the readings supported Daniel and Annie's years of observations, which placed their work in a more specific historical context. After seeing people use mirrors, reflective materials and glossy surfaces in the designed environment, Lead Pencil had now found other resources that expanded upon those observations.

Film and Music

Unexpectedly, I found that Daniel and Annie also got a lot of inspiration from films and bands whose work dealt with reflection. This media research, which came

from their extensive knowledge of obscure films and music, was a more hidden component of the artist's process. In the electronics shop vignette in *Diffuse Reflection Lab* there was a looped video of a band playing music on one of the televisions (Figure 38). The video had no explanation and only until someone directly asked Lead Pencil about the meaning, did I find out about this aspect of their research. In a description of this research Daniel narrated the process saying,

> We thought a lot about whether or not to play the entire Jacques Tatí film, *Playtime* inside of the electronics shop, because it is figuring really large into a lot of movies that we're making, especially in terms of very large prints of reflections. I don't know if you guys know the back-story of that movie but Tatí was under incredible financial pressure to get this ambitious film done and he had no money so instead of making buildings, he made models of buildings out of the photographs of materials. Like he got a steel sheet and he photographed it and then made multiple reproductions of that and then used it to make models out of so all the sets in that entire film are all photographs of buildings which was just a way to economically get around that problem, but I think it's a really interesting way to think about this strange condition of architecture. Is it staged set for life or is it just a stage? And how much do architects actually think about their buildings as something permanent versus something that is a stage? That confusion I think is really interesting and we were trying to play up here – where is architecture sitting within that role of the stage?

Ultimately, *Playtime* was not used and the artists chose a music video from Pink Floyd, which in the space appeared as a muffled loop of a 1970s rock video. Lead Pencil chose this video because they wanted to extend reflection to music, specifically looking at echo in music. Daniel envisioned this reference like a chapter in *Cabinet*, yet it remained a subtle reference in the overall structure. Daniel and Annie chose Pink Floyd's song based on the band's research of echo, describing how the band focused on the reflective aspects of their instruments using a leslie machine (which creates a sort of Doppler Effect with the speakers) to enhance that affect. Lead Pencil's research on film and music pushed their work beyond architecture and art, which expanded their overall

interpretation of reflection. While the references were subtle in the final work, they showed the broad interest that the artists took in their theme.

Artists

Just like qualitative researchers read pertinent literature to see how their work relates, Lead Pencil researched other artists and architects who have worked with reflection. In an artist talk Daniel and Annie referenced artists like Robert Smithson, Richard Estes and Michelangelo Pistoletto, whose work dealt with reflection in paintings and video installations. Figure 39 shows Estes' work, *Telephone Booths*, which parallels the reflective surfaces in the armature's western, gigapan photo wall (Figure 47). They also examined architects like Stephen Holl, Daniel Libeskind and Kazuyo Sejima and Ryue Nishizawa. The artists and architects took a different approach than Lead Pencil, but it helped to understand their work in a broader context of art history.

As seen in the work of Kazuyo Sejima and Ryue Nishizawa, the *Glass Pavilion* in The Toledo Museum of Art is made entirely of glass with few solid walls (Figure 40). In that example, Lead Pencil was interested in how museum-goers navigated an abstract space where it is difficult to distinguish where one barrier starts and another ends. In Daniel Libeskind's work, the artists looked at his futuristic proposals, asking why reflection was a desired quality in newer buildings. Amongst the fine artists, Lead Pencil looked at how they used mirrors and reflections to affect the gallery space, asking how a viewer interprets flattened images of reflections. These examples were then further investigated in Lead Pencil's process, allowing certain aspects of the other artists' works to come through in *Diffuse Reflection Lab*.

Execution Stage: Working in the Studio

When the artists arrived to The University of Texas at Austin for their residency, the building of *Diffuse Reflection* was already in motion (Figure 41). Prior to arriving, the artists had multiple correspondences with the VAC, sending a list of needed tools and materials along with an architectural floor plan of the structure. The first week the structure was already in place, allowing the artists to turn their attention to the workers' questions and material runs.

Through the execution of *Diffuse Reflection Lab*, my focus turned to Daniel and Annie's use of materials and how they made editing decisions when working on site. Another important theme that developed in this stage was how Lead Pencil negotiated their role as artists. Specifically, I was interested in how they negotiated their artist identity with the workers, the institution and ultimately themselves.

While I worked to develop these themes I constantly asked myself whether these themes could be considered research. In my second interview with the artists, while they were in the midst of building I asked them how they were conducting research in the execution stage. Their immediate response was hesitant. Daniel said, "There's a lot of things going on at once. So it's hard to compartmentalize that and call it research, it's a little bit less focused" and Annie simply added, "Yea, it's hard to call it research" (personal communication, January 26, 2013). Since the artists were in the midst of the creation, I believe it was more difficult for them to identify their work as research. It is important to note the artists' disconnect between process and research, but I believe my observations show the artists' engagement with materials and space in a manner that resembles research.

On-Site Research

In Chapter 4, I described a few influential artworks that Lead Pencil had created prior to their work in Austin. A major theme that I touched upon was that of site-specificity. Site-specific installations account for the space that the artwork is being built in, oftentimes referencing the social, cultural, or historical background of the space along with its physical qualities. In *Diffuse Reflection Lab,* the artists worked to incorporate narratives from the VAC's history while also addressing the unique aspects of the gallery's physical space.

After their first site visit, the artists created mock-ups in their Seattle studio. The models explored the light and dimension of the gallery. As Daniel explained, "if you have a three-sided black box and you have bright on this side [the open side] what materials can be put in front of that and how can they affect the interior of the space, the color and the light?" (personal communication, January 12, 2013). Another question they asked looked at how light plays with materials. From these questions Daniel and Annie were able to plan how they would orient their structure within the space. The use of a model allowed the artists to visualize multiple scenarios and experiment before arriving on site (Fig. 42 – Fig. 43). While Daniel considered the experiments to be "really simple light experiments" they provide a good example of experimentation and research in the studio art process.

Once on-site, Lead Pencil spent days visiting surplus shops around Austin, collecting materials that would fill the space. In this process Daniel and Annie would be sorting through commercial and retail furniture/objects, having to envision the space in relation to the materials. The process relied on reflection and adjustment, where many of the spaces took on new characteristics in response to the artists' scavenging at surplus.

One major on-site decision occurred on the second floor where the artists depicted an office scene. Originally Lead Pencil had envisioned a ramp that connected the mezzanine level of the gallery to the second floor of the structure. But after further consideration, the artists changed dimensions of the building, moving the second floor slightly down so it would be below the mezzanine level. At first the second floor was going to be an elevator lobby, but once Daniel and Annie changed the dimensions, they realized the materials available in surplus pushed them towards a narrative that depicted the interior of an office space. Annie described this decision saying,

> Having it on the same floor level just seemed wrong because they [the viewer] can't get to it on the same level. So we decided to step it down… Once we did that it felt like those occasions when you're looking at a building in urban situations and looking into somebody's office, especially in lower Manhattan – you look and you see everything there, brief cases, shoes, they've taken off socks laying on the floor, so there's voyeurism that plays into the work here looking into the office space. So we wanted to kind of that play a little bit. (personal communication, February 5, 2013)

An image of Annie mid-process during the building of the office space is seen in Figure 44 and Figure 45.

Much like a researcher relies on raw data, the artists were dependent on the surplus materials available on site. Ultimately the materials in surplus determined the narrative on the second floor, making it an office. When I observed Daniel and Annie in the studio, they discussed how important it was to let go of pre-conceived ideas surrounding materials because it could limit their process. This notion of letting the material "speak to you" is not an out of the ordinary art practice, but I believe it played an important role in Lead Pencil's research process since they had to deal with material limitations and unexpected variables throughout the execution of their work.

Beyond the physical aspect of site-specific work, the artists also incorporated narratives that referenced the history of the VAC. One story in particular came from Jade Walker who told the artists about a previous exhibition where food services arrived to set up for the opening reception and someone broke a huge glass panel of the gallery when they were moving a keg. The gallery could not replace the panel before the opening so they had to carry on with a broken window. When Lead Pencil heard this story they were empathetic, understanding the stress and meticulous preparation that goes into a gallery opening. In response to this anecdote the artists created a scene where a cart crashed through a glass pane in the structure. The scene is left frozen in time with shards of broken glass surrounding the cart and the destruction still fresh (Figure 46). Daniel described the cart saying,

> We heard a story of the institutional history, but what became part of that component was just that an event took place that ruined this element of perfection. We all work really hard to make something perfect and things get messed up in some way so we wanted to echo that that had taken place. (personal communication, February 5, 2013)

While most visitors to the VAC were not familiar with the keg fiasco, the artists extended that scenario to address a broader idea, which was the destruction of perfection.

Another aspect of on-site research occurred with the exploration of technology, specifically the use of a gigapan camera. The gigapan is a high-resolution camera that basically photo-stitches hundreds of high resolution images so that the final image can have a kind of infinite resolution (personal communication, January 9, 2013). The artists got access to this camera through a fellowship from Carnegie Mellon where the artists were invited amongst five other groups to explore the possibilities of the gigapan. Originally the artists did not intend to use the camera for *Diffuse Reflection Lab,* but once

they entered the space they saw a perfect opportunity for the camera. Daniel described the use of this technology saying,

> [Using the camera] is a form of research because we had to put that into practice in order for us to find out what it can do. Even having done it now, we know that there's significantly more that it can do and more we could have done to push it so that's exciting. It opens up another territory that will give us the chance to explore it at some point (personal communication, January 26, 2013).

The artists used the gigapan camera in order to capture the reflections of the campus, which are seen in the gallery's front wall. They then printed life-sized photos of the reflections in order to create a replica that the viewer encountered upon walking into the space (Figure 47). This work allowed them to create large-scale photos but served more as an exploration for future works. In the end, the use of the gigapan camera is part of a broader career-long process. The artists were engaged in two processes simultaneously – their present project work along with preparation work for future projects. The work that they created with the gigapan was ultimately considered "a first gesture" since the artists anticipate to use the camera more in depth later on (D. Mihalyo, personal communication, February 28, 2013).

Ultimately, the artists' on-site research was done as a supplement to the research conducted in the planning stage. Daniel described the research as "fill in research" because most often the artists were responding to opportunities that they saw come up within the space. Also, while some of the research was fully developed, a lot of things led to dead ends or Daniel and Annie bookshelved some research until a later iteration of the work (personal communication, January 26, 2013). This approach leads to my next section, which shows how the execution stage relied more on editing rather than original conceptualization.

The Editing Process

While the artists were in the space they had upwards of twenty narratives that they could have included in the armature. Along with the numerous ideas that Lead Pencil had prior to arriving, they also encountered new ideas on-site, which added to the overall project. This build-up of narratives and ideas meant that the artists had to self-edit while working in the studio. The progression from research to editing was not linear but occurred repeatedly throughout the execution stage, causing a co-dependent relationship to form between the two actions.

In the editing process, I found that the artists would talk through many of their decisions, not only between themselves but also with the workers. Daniel described this process saying, **"**We have to be able to communicate what we're doing on any given day and it was really a process of trying to discover the opportunities within that" (personal communication, February 28, 2013). In seeing how Daniel described this process, I saw that reflection and critical dialogue were critical tools. In the final interview, when I discussed editing with the artists, Daniel compared it to film saying,

> There's a lot of different ways you can shoot a scene and the way you shoot it or even the way you edit it is going to communicate a totally different narrative even though the content is the same. And I think it does end up on the editing room floor or just as a passing thought... I think that's a lot of what we're doing also. There's a general idea for a narrative, there's the final version that makes it in and then there are the ones that don't make it, but somehow they stay in our memory and like Annie said we'll pick them up somewhere else. (personal communication, February 28, 2013)

The process of generating a narrative and then deciding where it belonged within the artwork, not only described how the artists approached their original research, but also how they approached aesthetic decisions.

One example from the editing process occurred when the artists were deciding how to cover the frame of the structure, which in complete form had an unfinished

appearance. The artists made this decision because they wanted to show a reflection of work at different points in time. Daniel described this decision saying, "We often do that in our work, where you're building something and you're seeing the making of it – you're seeing its existence during its real life and you're seeing its demolition simultaneously" (personal communication, February 5, 2013). Annie elaborated on Daniel's explanation saying,

> We didn't want to do something where we'd finish it and it looked like an architecture project. There's a really fine line… So once it started going up we had them [the workers] stop, and then it didn't look like an enclosure, it was more of a distraction so we added drywall and said let's leave that out. (personal communication, February 5, 2013)

Annie's explanation shows the process of action, reflection and editing, which occurred throughout the creation of *Diffuse Reflection Lab*. This example also shows how Daniel and Annie's conversations moved back-and-forth, where oftentimes one person would start a thought and then the other one would expand upon it. This type of back-and-forth was very evident in their communication and I will further expand upon it in the next section that discusses the role of the artist.

Role of the Artist

When observing the artists in the execution stage, I was also interested in how the artists' "voice" would develop throughout the studio art process. By choosing a collaborative, I thought it would be easier for me to see the artists' voice since I would be able to hear the artists explicitly state their objectives while they worked together. Once I began my observations, I realized that my expectations were not true to reality. When I entered the space, I realized that most of the daily exchanges revolved around menial tasks. In reality, the process was fragmented and no single job embodied the installation's big idea. Once I overcame my false expectations, I came to realize that the

menial and, at times, vague dialogue was still valuable in understanding Lead Pencil's relationship and voice.

In the studio I observed the artists' conversations, where one would interject to clarify the other person's statement, then add on to it based on his/her understanding. The conversations took place in the corner of the studio where the artists had the best vantage point of the overall structure. In my field notes a common observation went like this:

> Annie presented issue in the café area and Daniel stands back, nodding and listening. Once she has presented, the talk moves to a back and forth. Daniel steps in holding molding beside Annie at the back wall of the café. There appears to be an equal dialogue at this point. They move through the area, pointing, gesturing and nodding.

Daniel and Annie would typically stand close together, speaking softly to one another. Their conversations had an air of privacy to them, which I believed was echoed multiple times in their interviews when Annie stated she was uncomfortable with having to fully explain her process while in the midst of it. This intimate type of dialogue made it difficult for me to observe them without intruding. In response to Lead Pencil's desire for privacy, I often had to stand back, taking notes on Daniel and Annie's body language and the snippets of dialogue that I could overhear (as seen in Figure 48).

Even in our interviews, when I discussed the execution stage with the artists, I found that their responses mirrored their interactions in the studio process. The artists' statements were shorter and one person would oftentimes cut in to add more to the other person's statement. When one person would speak I noticed the other would intently look at their partner while listening, this was not only evident in my interviews with the artists but also the interviews the VAC had with Daniel and Annie (Figure 49). This type of dialogue in the studio and in our interviews showed equality and respect between the

artists. As they displayed this model of dialogue in their own process, I also saw this attitude extend to the workers in the space (I wrote more in-depth on this topic for the course reader in Appendix C).

Collaboration: The Artist Manager Model

Due to the scale and time constraints of *Diffuse Reflection Lab,* Lead Pencil had to rely on the labor of hired workers and student volunteers to complete their work. Amongst the hired workers there was a core group of four males who Daniel and Annie called "group leaders." Of those four men, three were permanent gallery workers with a fine arts background and the fourth male was specific to the project, coming in from the University's Masters in Architecture program. While Lead Pencil has previously worked with specialized workers in their large-scale installations, they have typically built more long-term relationships with those workers. When I asked Daniel and Annie whether this form of collaboration, which puts a lot of faith in the temporary workers, was typical they responded,

> Daniel: That's very much in the building/construction trade that we come from and our role more typically as an architect. . .
>
> Annie: It's not something that I'd say we do regularly in art making. This is very different in that we are essentially making a building inside of a gallery space, so I think we're relying on a trade process more than an art making process. Normally we have a few assistants, anywhere ranging from two to five helping us but they're with us everyday, working in a shop or studio. . . (personal communication, January 26, 2013)

The use of trades-based labor caused Lead Pencil to separate this type of collaboration from their more artistic type of collaboration, but I would argue otherwise. I believe that contemporary artists are so commonly using trade-skilled workers to create their work that this type of collaboration has become an implicit part of large-scale art making.

In addition to the group leaders, whose work was specialized and trades-based, Lead Pencil relied on the work of student volunteers. As part of the VAC's artist-in-residence program, the gallery encourages proposals that enable artists and students to work side-by-side. When first proposing *Diffuse Reflection Lab*, Daniel and Annie envisioned an interdisciplinary project that would attract students from a variety of disciplines. This proposal was a departure from the artists' typical work in collaborative settings, because they invited students to take in part of the research and gathering in a more formal way than the "informal way we do that amongst ourselves" (D. Mihalyo, personal communication, January 12, 2013). By inviting people into the research process, the artists were also letting go of some of the ownership around the generation of an idea. This approach, as Daniel explained it, "is the whole point of art anyway – to get people interested and excited about discovering the world around you and seeing things that aren't necessarily from your perspective" (personal communication, January 12, 2013).

Even though the proposal envisioned a more involved student-artist interaction, Lead Pencil did not account for the specialized skill-set that their artwork required, so ultimately it was difficult for them to engage many of the students. Later into the process, Daniel described this struggle saying, "It's pretty hard to get people involved, that's different than other projects so that's the first time that we've had this difficult of a time getting the transient help to fully participate" (personal communication, January 26, 2013).

For the students who did come into the space, they would go directly to the artists and ask where they could help. Originally, the group leaders had been introduced as facilitators between the students and artists, so that the artists would not have to constantly delegate tasks. But the difficulty with this arrangement was that Daniel and Annie were the best authorities in the studio, so in response most student volunteers went

directly to the artists in order to avoid confusion. When watching Daniel and Annie delegate tasks and mentor students I began to see that their role as artists evolved into one of artist managers (Fig. 50 – Fig. 52).

One day, mid-way through my observations I was trying to compare the art studio to a research lab and my first instinct was to call them managers. Much like a manager, the artists were running a studio space so that the volunteers and workers efficiently worked to develop their research. Later that day I read *Work Ethic* by Helen Molesworth (2003), which presents the idea of an artist as a manager/worker. This writing is based on the development of conceptual art in the 1960s, but spoke to how an artist's idea can be delegated to laborers, making the artist's role more about the synthesis of ideas rather than craftsmanship. Molesworth references Donald Judd as an artist who "felt increasingly comfortable turning over the production of their work to paid assistants and fabricators" (2003, p. 30). While Daniel and Annie's practice is more hands-on than Judd's, they still delegate a lot of labor to their workers, making their role shift from artists to artist managers. Being artist managers means the artists' roles must employ tools of communication, negotiation and planning. Much like the regiment seen in research labs, Lead Pencil had to develop a managerial identity so that they could create artwork in a productive studio space.

After reading about the artist manager, I made sure to explore this topic in my second interview with Lead Pencil. When I asked if they identified with this label their first inclination was to say, "I guess," but contrarily I found that their descriptions of their studio process were managerial. One description from Daniel described the necessity of collaboration in order to fulfill a common goal. He stated, "There's something that requires a lot of hands on deck and training people to do a single thing that we're all doing together" and Annie then added, "So it's like a factory…" (personal

communication, January 26, 2013). In order for these tasks to occur all at once, the artists had to let go of ownership and as Daniel stated, "This has been very diffuse, like there's a lot of things going on that, like we can't even observe things happening…" (personal communication, January 26, 2013). So in order for the work to move forward, the artists managed and entrusted the process to group leaders.

Another aspect of management includes the negotiation of personalities. Daniel and Annie have had experience working with skilled craftsman on previous projects and discussed how they had encountered headstrong workers in past interactions. When negotiating more outspoken workers Annie said, "You either want to insist on a certain way just because you think that your output is different or you succumb to somebody else's suggestion because you realize that their suggestion is much more efficient…" (personal communication, January 26, 2013). While the artists have dealt with negative experiences, they have learned to identify possible conflict in their own collaborations and can better anticipate arguments that will occur in their other collaborations. Ultimately, the collaborations have enabled Lead Pencil's work to evolve. Daniel described this when he said,

> This invites in a different kind of energy into the process and I think that there are times it can be really beneficial, not just from the getting work done point of view, but from conversations that develop. Even observations that people make can help alter the way a project goes and often for the benefit of a project. (personal communication, January 26, 2013)

So while the artists must manage, they have also found ways to appreciate external collaboration, capitalizing on its possibilities rather than seeing it as a burdensome aspect of large-scale production.

The Artist and The Institution

As I mentioned at the beginning of this chapter, Lead Pencil's work allowed me to see the professional side of art production, where artists work within the constraints of an institution. While I would love to imagine the artists' research as purely driven by scholarship and curiosity, I must acknowledge how the Visual Arts Center and The University of Texas at Austin affected the artists' research. The institution's role first came to my attention when Daniel and Annie referenced their proposal for *Diffuse Reflection Lab.* In response to the VAC's guidelines for student-artist collaboration, the artists proposed a series of small lecture seminars where they would discuss readings that centered on reflection. Student schedules prevented these seminars from occurring so the course reader developed as a compromise. For me the course reader came to represent the heart of the artists' research, but I am not sure would have occurred if it were not for the VAC's initial guidelines.

When Daniel and Annie discussed the role of the institution, they focused on the opportunities that institutions grant them over their private studio practice. Annie stated,

> We can't create the kind of piece that we're creating here in our studio and just leave it there. So it's a really nice opportunity for us to have institutions invite us and explore this idea in a really large form. (personal communication, January 12, 2013)

The institution also ensured that the artists' work would interact with the public. Through the artist talk, the media tour, the staff tour and two interviews, the Visual Arts Center fully capitalized on the artist's narrative as a way to define their work (evidence in the VAC's poster for the Artist Talk seen in Figure 53). When I conducted my second interview with Daniel and Annie, Annie referenced another interview they had done with a University videographer, which had asked similar questions to my own. As Annie described it, "The institution always tries to make the most of it" (personal

communication, February 28, 2013). But in this instance, I came to wonder whether my own research was being overshadowed by the demands from the institution. I found that the Visual Arts Center and I had similar goals, which was to have the artists explain their creative process so that others could learn from it. Rather than view the institution as competition, I came to embrace their work as a way to triangulate and ensure my own data. I am pleased to know that Visual Arts Center conducts this type of investigation with every artist they host, because it reinforces my own interest in the creative process and proves to me that this information is interesting to a broader audience.

Architect vs. Artist: Negotiating Identity and Expectations

The final theme that came out of my studio observations was about identity, specifically how Daniel and Annie negotiated their association with architecture and art. In our interviews, I often felt like Lead Pencil's descriptions moved from concrete specifics towards general statements, which described what their artistic practice *should* be. Looking back, I came to see our conversations as sessions for the artists to work through their identity. The fact that the artists concentrated on their non-defined identity as architects and artist is not surprising since their work reflects the same question: is it art or architecture?

Identity can be observed through many facets, but I was particularly interested in Lead Pencil's language. Since Daniel and Annie had similar training in architecture and art, their language comes from the same field. Daniel described this language when he said,

> We're coming from this particular background and a way of working and a way of analyzing the world that is inherently directly related to the architecture training. That helps us because we speak the same language. I can draw something and she knows exactly what I am thinking not just because the

> familiarity of what I draw or how I see things but because it's the same language. (personal communication, January, 12, 2013)

Conflict in communication then occurred when Lead Pencil collaborated with workers, whose backgrounds varied. In my first week of observations, I got tripped up on architectural terms that felt foreign. I realized I was not alone when I heard a worker jokingly tell Daniel, "You're using a different language!" In response to this conflict Annie said,

> It was fine, but I think for them [the workers] it was really different because they kept saying, 'what does that mean.' For us it's so intuitive that I didn't understand their question at first. So I'm like, 'what do you mean what does that mean?' And they're like, 'I don't know what this is directing me [to do]' and I'm like, 'oh because the language is so different.' (personal communication, January, 12, 2013)

One example occurred with my understanding of the word "populate." In many of the artists' descriptions of the construction process, they said that they would "populate the space." I asked an architecture student what that word meant and she was initially surprised, saying that the word was second nature in the architecture studio. In architecture, when a model or drawing needs to show how humans would interact with the space, architects "populate" the space by adding people or objects. My response was to ask why not say *fill* the space. The architecture student paused and then explained that fill would describe how to use light or color in the space. For me, coming from a fine arts background, that interpretation seemed strange but it helped illustrate the differences between my background and Lead Pencil Studio's.

In their own studio practice, Daniel and Annie have created an environment that embraces an identity between architecture and art, but since their work most commonly exists in the fine arts they have to face these differences. When I asked questions that dealt with research and process in an art environment, I found that Daniel and Annie

would oftentimes remove themselves and use "you-statements" instead. This is seen throughout our interviews, like when Annie said, "I think as an artist you never think about it [tasks] like, I'm going to go in there and I'm going to do that" (personal communication, January 26, 2013). In contrast to their more rigid architectural background, Daniel and Annie would make general comments about art making, which interestingly described a more fluid and unstructured approach to art (opposite to what I observed). Another example occurred when we discussed the role of criticism in the art world and Annie said, "I think general consensus in the artist's point of view is you try to ignore it, because you don't want your work to be somebody else's opinion about it…" (personal communication, January 12, 2013). I believe that by explaining their practice with these generalizations, Daniel and Annie are able to place themselves within a narrative closer to fine arts than architecture. This shift towards the fine arts may cause Lead Pencil to place unrealistic expectations upon themselves but I believe it also drives their work to further question what type of architectural language can become art instead.

The Presentation Stage

In our final interview, I asked Daniel and Annie whether research continued to occur in the presentation stage and Annie replied, "The research phase has to end at some point… but I'm always grateful to have the research whether we use a huge aspect of that or not" (personal communication, February 28, 2013). Acknowledging Annie's statement, I knew my study had to move away from the research process towards the presentation of research. While the artists did explain their research/work while in process, I focused my study to how Daniel and Annie described *Diffuse Reflection Lab* once it was complete. Presentation took form in multiple forms including written form in the course reader; lecture form in the artist talk; and conversational form in the opening

reception and the VAC staff tour. Through these presentations, I found that Daniel and Annie would limit or extend their explanations, depending on the audience. In our interviews the artists described a more limited approach, where research takes a back seat to the artwork itself. So when comparing Lead Pencil's revealing presentations to their more limited philosophy, I focused on how the artists found balance.

To Explain or Not to Explain?

In our interviews, Daniel and Annie repeatedly said that they preferred to let their artwork speak for itself, rather than giving a detailed explanation. I observed this approach most clearly in the artist talk, days before the opening reception. The artist talk occurred at The University of Texas at Austin in the Art building and was open to the public, although the majority of the audience was students and faculty members. Lead Pencil gave a comprehensive overview of their previous works and after over an hour of lecturing they discussed their on-site work. In discussing *Diffuse Reflection Lab*, Daniel and Annie focused on the overall idea, showing photos of reflection that were taken in Austin. They catered the talk to their location, discussing how their work was site-specific to Texas. Overall their presentation of the work focused on what had gotten them to their idea, showing their light experiments and observational photos. They then dedicated slides to show other artists that have influenced their investigation of reflection (all of which we discussed in the planning stage interview). Interestingly, Daniel and Annie did not provide any specific narratives that described their more detailed research, leaving that up to the public to pursue once they had seen the work. Since the audience had not been in the gallery space prior to the artist talk, the artists used information that provided background rather than information that straightforwardly directed the viewers.

By omitting the specific narratives, the artist talk prepared the audience for the work and pushed them to engage with the work first-hand in order to understand the intent. Annie supported this approach when she said, "I'm making visual art so everything that I'm describing should be through that language and just put that out there…" she went on to say, "but sometimes I make something that's complicated and I do wonder if people are going to get it" (personal communication, January 12, 2013). So even though the artists want their work to speak most directly as a visual piece, they still struggle to completely remove their narratives and occasionally still give credence to the research.

As they struggle with this balance, the artists continue to find value in the interpretations that occur from viewers who are completely unaware of their research process. In the few instances that Daniel and Annie do get feedback from viewers, whether from overhearing them in the gallery or receiving a random one-line email, they feel vindicated by their decision to not over explain their work.

In the instances that the artists have given in-depth explanations to their work – they have received mixed responses from the public. Annie described a positive type of interaction saying,

> Even if people don't see it [the research] in the built work, when you explain those aspects of it I think they get their own ideas, which I really like… Even if it's totally different than how we authored it or we intend it, I think that's really interesting and exciting. (personal communication, February 28, 2013)

Explanations allow the viewer to make separate connections to the work, but it may broaden the scope of thought from which they can interpret. Meanwhile in other presentations, the explanation of research can seem futile. In one instance Daniel described a presentation where, "we had a really elaborate set of research that we gave a lecture about and someone asked, 'do you really expect anybody to really get that?' And I

guess the short answer is no we don't" (personal communication, January 12, 2013). This example delves into a bigger problem – even when artists do give an in-depth explanation to their research, is it interesting or relevant for the public?

The artists' response to this issue is ultimately that they do the research for themselves and if anyone shows interest in it, they are happy to explain more. In the VAC staff tour, I experienced the opposite of the artist talk where the artists' eagerly and openly narrated the research that went into many of the small, detailed decisions of *Diffuse Reflection Lab.* In this talk, Daniel and Annie were in a more intimate setting answering questions for the VAC director, staff members, and gallery educators. The audience had been a part of the artists' process so they were able to ask more frank questions. In response I found that Daniel and Annie were happy to give long answers that referenced inspiration from the institutional history, their life in Seattle and other cultural materials. In that instance, the audience made a huge difference and ultimately the audience determined how Daniel and Annie presented the research in their artwork.

Written Work: Whose Job is it Anyway?

Another way that the artists presented their research was through their writing. Much of art criticism has been reduced to sound bites and descriptive essays, which pushes contemporary artists to write about their work more often. Writing already happens early in the process when artists write grant proposals, but it takes a more public role in the artist statement or other reflective texts. Daniel described art writing when he said,

> Almost like photographs work as a way of flattening out the subject I think some writing will flatten it out also. You know when you write a grant its just really helpful to get it out on paper because it requires you to formalize it or flatten it out in a way that's intelligible to others. So I'm looking forward to doing that even if it's just one page. It will be really nice to talk about some aspects of it [*Diffuse*

> *Reflection Lab*] from our perspectives. (personal communication, February 28, 2013)

Although, Daniel stated the importance of written reflection, he was also quick to discredit himself saying, "We aren't inherently literary or verbal" (personal communication, January 12, 2013). This ambivalence towards written reflection caused the artists to delay the writing process, meaning many of their written explanations do not occur until some other work is out and they have had time to reflect on their work.

Overall the artists were positive towards writing as a form of explanation, seeing it as necessary and as "another way of exhibiting your work" (A. Han, personal communication, January 12, 2013). In my observations, I saw the course reader as a form of the artist's written explanation but the reader did not place the artists words at the center of the presentation. Instead, Daniel and Annie asked for contributions to the reader, asking for others to write about their interpretation of reflection. In my final interview, I asked the artists why they did not contribute their own writing to the reader and they responded that it would seem "heavy handed" since they had already created the artwork (A. Han. personal communication, February 28, 2013). Annie's response showed that despite the more direct interpretation that can be taken from written reflections, the artists maintain the belief that the artwork should speak more loudly.

Moving Forward

In looking back, I realized that Lead Pencil integrated research into their studio art process more at the beginning of the process than at the end. I strove to uncover actions and thoughts that could be research related, but oftentimes I wondered if I was forcing a connection, instead of just embracing a natural cognitive thought process that occurs in the art studio. When seeing how the artists viewed their own research, I came to see that research was most significant to the artists' overall practice rather than the public's

interpretation of the work. Moving forward into Chapter 6, I have to ask – can Lead Pencil Studio's research be used in educational settings, even if it is a more hidden part of the studio art process?

Figure 33: Photo from Annie's Inspiration Narrative, Seattle, WA

Figure 34: Example of Intentional Design, Austin, TX

Figure 35: Example of Intentional Design in *Diffuse Reflection Lab*

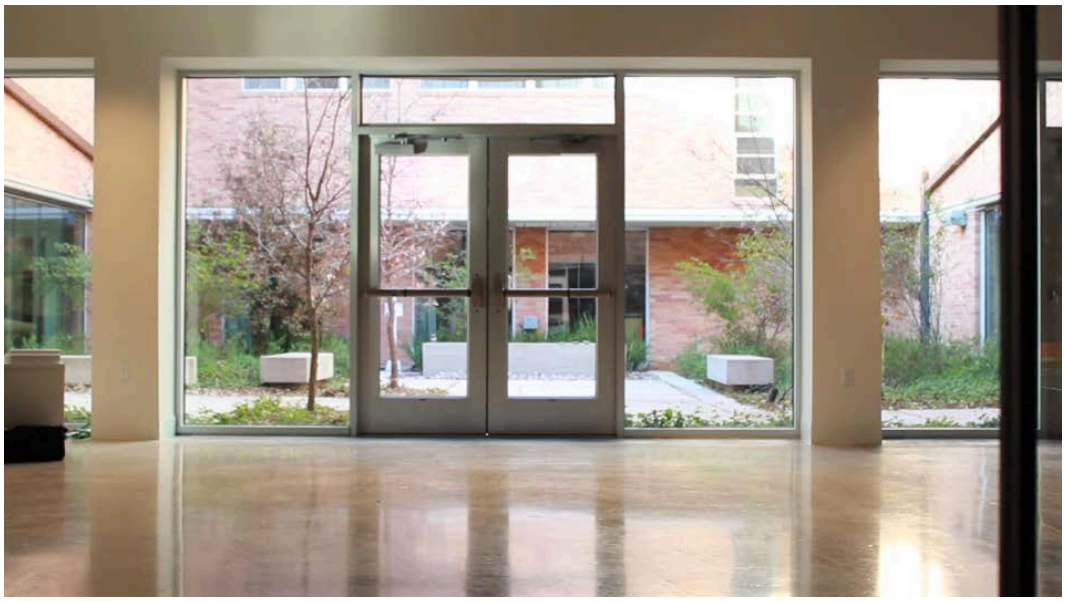


Figure 36: Example of “Texas Light” in Vaulted Gallery

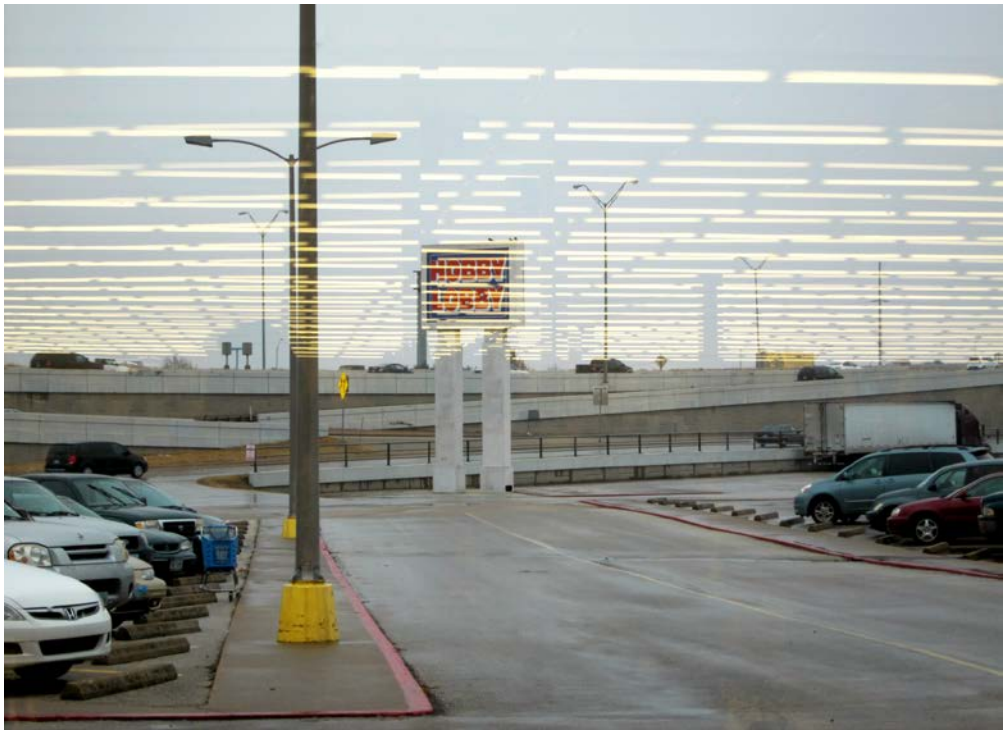


Figure 37: Observation Photos, Austin, TX

Figure 38: Detail from Electronics Shop, Stills from *Pink Floyd* Loop

Figure 39: Richard Estes, *Telephone Booths*, 1968

Figure 40: Sejima & Nishizawa, *Glass Pavilion*, 2006

Figure 41: Status of Structure at Beginning of VAC Residency

Figure 42: Light Experiments for *Diffuse Reflection Lab*

Figure 43: Light Experiments for *Diffuse Reflection Lab*

Figure 44: Annie Working on Office Vignette

Figure 45: Annie Overlooking Office Vignette

Figure 46: Keg Fiasco Reference in *Diffuse Reflection Lab*

Figure 47: Gigapan Camera Wall with Reflections

Figure 48: Daniel and Annie Working in VAC

Figure 49: Daniel and Annie in VAC Interview

Figure 50: Workers in VAC

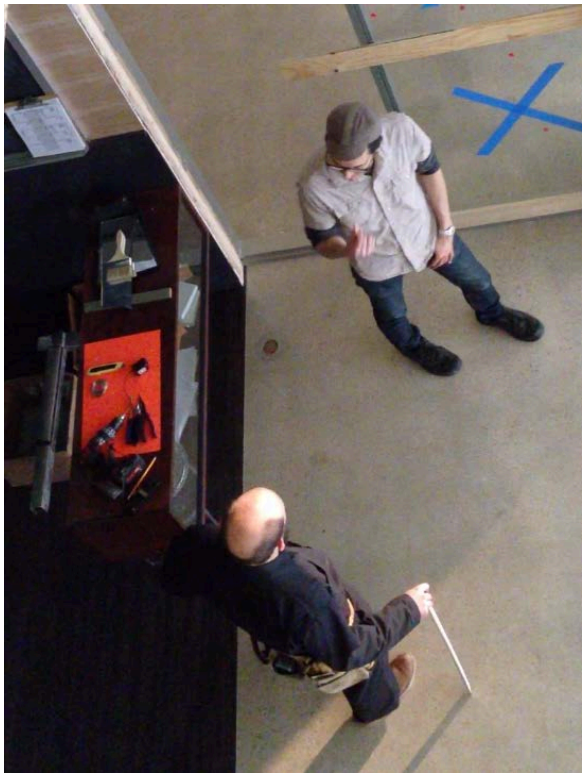


Figure 51: Daniel Speaking with Group Leader in VAC

Figure 52: Student Volunteers in VAC

Figure 53: VAC Poster for Artist Talk

CHAPTER 6: CONCLUSION

Introduction

When I began my thesis, I was focused on the seemingly disparate relationship between creativity and research. I looked to practice-based research as the best approach to bring these ideas together, and as I delved further into my research I found that creativity and research exist together in studio art practice as co-dependent actions. At times research informs creative actions and at other times the creative process inspires further research. Through this observed back-and-forth, I was then able to address my central research question, which asked whether artists, specifically Lead Pencil Studio, integrated research into their art while working in each of the three stages of the studio art process. I was able to observe different types of research based on the stages of production and in my analysis chapter I was able to better classify these actions as they mirrored actions existent in qualitative research. Using my analysis as a framework to describe the studio art process I can now address the second part of my research question, which asks how each stage of the studio art process (planning, execution and presentation) incorporated interdisciplinary learning, if it did at all. As I come to an end, I hope to show how Lead Pencil Studio's work can contribute to the conversations surrounding practice-based research, but more importantly I hope to provide a model of interdisciplinary learning, showing how others can use the artistic process to address ideas across disciplines.

Lead Pencil and Practice-Based Research

Structure in Creativity

By separating the artistic process into three discernible stages, I was able to better analyze and understand my findings. Through my investigation I realized that I had

overlooked one stage that occurs prior to the planning stage – the observation stage. The observation stage marks when the artist first engages an idea or theory, which then inspires a work of art. My interpretation of the planning stage had accounted for observation, but when I interviewed Annie and Daniel, I found that their observation narratives were so involved that they needed to become a separate stage in the artistic process. Even though observations continue throughout the artistic process, and it took Annie and Daniel fifteen years to act on their observations, I believe this stage still marks an important aspect of the artistic process.

My observations of the artistic process also showed me that integration of research changes depending on the stage of the artistic process. As Annie had stated before, "the research phase has to end at some point" and this was a fact I had to deal with earlier in the artistic process than I anticipated (personal communication, February 28, 2013). As research wound down in the execution stage my observations shifted towards the artists' identity, which is not as readily discussed in current literature but remains to be an important factor in practice-based research.

Referencing back to Chapter 2, where I introduced the art/research continuum, I found the continuum applicable to Lead Pencil's different stages of artistic production. For each stage of the artistic process, Daniel and Annie moved along the continuum, working at times more within qualitative research and at other times more within artistic inquiry. In Table 5 through Table 8, I will show how I believe Lead Pencil Studio engaged the art/research continuum in each stage of the artistic process, including the observation stage.

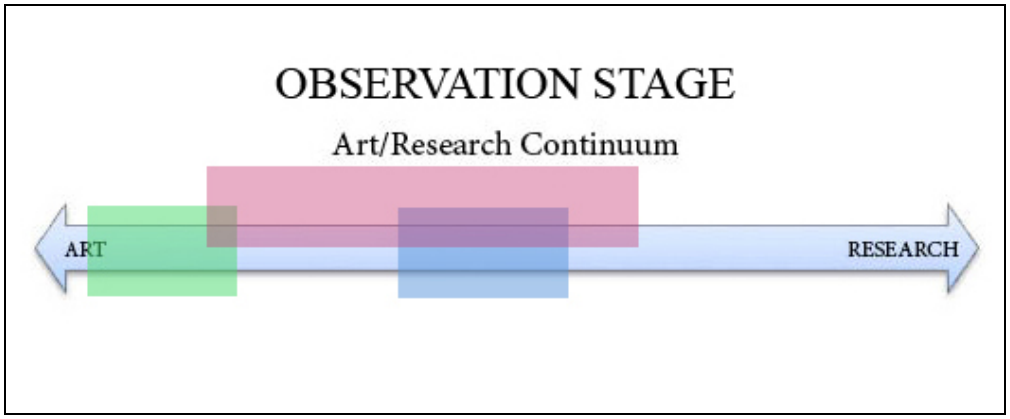


Table 5: Observation Stage Art/Research Continuum

Table 5 features three different colors because of the different narratives that came out of the observation stage. The green bar on the left represents Annie's narrative about the abandoned warehouse in Seattle, which I believe was a form of artistic inquiry. Her observations were based in an emotional experience that surprised her, showing how intuition and emotions inspired her rather than logic or strategy. Meanwhile the blue bar represents Daniel's description of intentional design, which I believe shows an even mixture of art and research. His observations were visually-based, looking at surfaces and polishes, but his pursuit came from a logical thought process based in his experience in architecture. The pink bar represents the artists' combined narrative, which considers the artists' calculated observations of the Vaulted Gallery along with their more intuitive reaction to the Texas light.

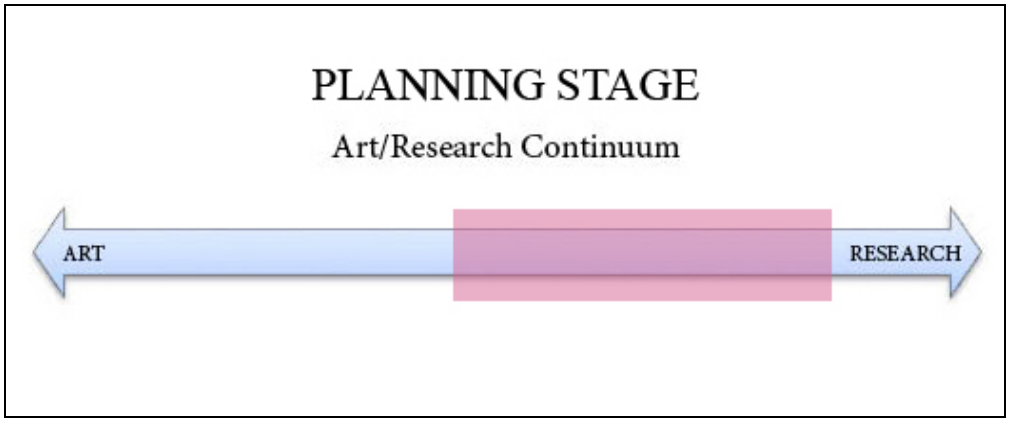


Table 6: Planning Stage Art/Research Continuum

The planning stage continuum (Table 6) shows when the artists' work most closely resembled qualitative research. At this point, they were reading secondary texts on reflection; researching other artists, musicians and filmmakers who worked with reflection; and, conducting light experiments to best prepare their space. The planning stage did bleed into the execution stage, where at times the artists continued to collect images of reflection in Texas while they were working on-site. But ultimately, the artists' research was done to gain comprehension and not to generate new theories, which prevents it from being purely qualitative research. While this stage resembles qualitative research overall, the real divergence occurred when the artists moved to the execution stage.

In the execution stage continuum (Table 7) the artists conducted material research and began to synthesize their initial research into the armature itself. At times the research was apparent, as seen in the *Pink Floyd* video in the electronics shop. But at other times the research on reflection was more discreet, as seen with the use of reflective lamp heads and glossy paint in the café. While the artists' aesthetic decisions were informed by their background research, the artists are not explicit in making those

connections to the viewers. This approach shows how the artists' analysis of research remains to be an artistic pursuit, which relies on the artwork rather than writing.

Also, at this point the artists began to taper off their research, shifting their creative, exploratory process to a more goal-oriented process. The goal-oriented process relied on task lists and deadlines, which also helped justify the artists' managerial identity.

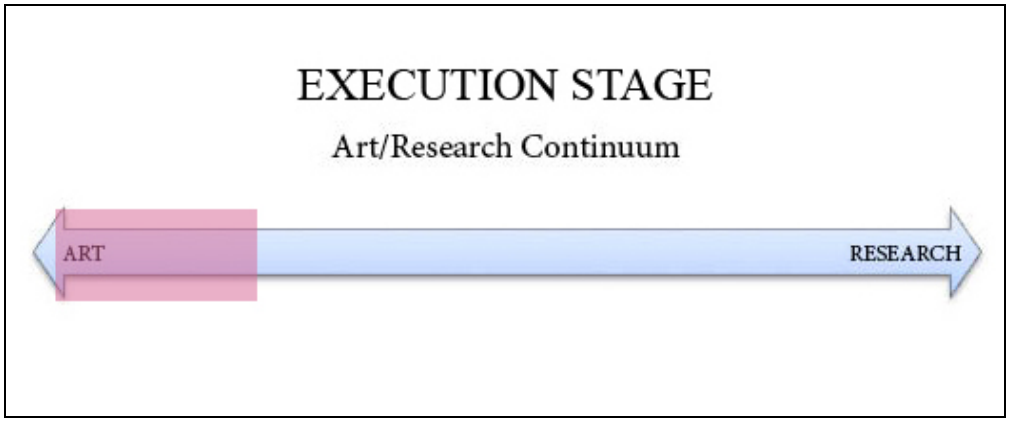


Table 7: Execution Stage Art/Research Continuum

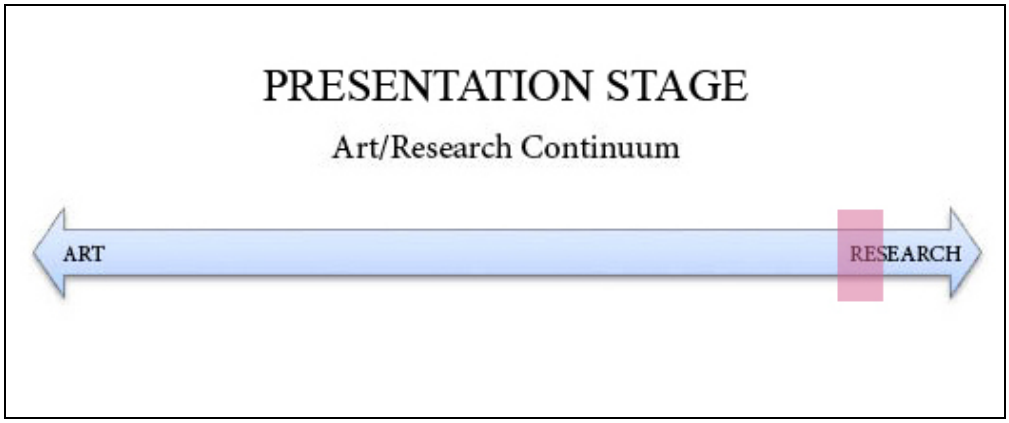


Table 8: Presentation Stage Art/Research Continuum

The artists' final stage of the artistic process, the presentation stage (Table 8) practically removed research from the process. I placed a small marker towards the qualitative end of the art/research continuum, because the artist talk and course reader somewhat resemble the qualitative researcher's final text. While the artists mostly relied on photos and images in the artist talk, I believe their spoken narratives that explained the images showed synthesis and analysis. As I previously discussed, the writing component of the presentation stage was non-existent (at this point in time), but it is an aspect of the artistic process that Lead Pencil Studio is growing into.

If you are to look at Table 5 through Table 8 from beginning to end, you can see that the artists went back-and-forth between artistic inquiry and qualitative research, switching roles throughout the artistic process. Ultimately, this back and forth shows that art and research are not fixed within the artistic process.

Career-Long Research

When comparing *Diffuse Reflection Lab* to Lead Pencil's previous body of work, I came to see a continuation of themes and ideas. From this continuity, I came to the conclusion that the artists may not only engage in research for specific projects, but they engage in a career-long research process. In many ways *Diffuse Reflection Lab* became background research for the artists' future work. Specifically looking at the artists' use of the gigapan camera, the VAC served as a testing site for them to explore a new form of technology. Also, the artists' final photographs of the site altered many of the structure's optical illusions, which were easy to discern in person, but difficult to identify in a flattened image (Figure 47). In our final interview, Daniel discussed their interest in further exploring how photography affects their work, so even though the stages of

art/research cycled through in this one project, they also opened up the possibility for many new cycles in the artists' broader timeline.

Emergent Findings: Identity and Voice

Besides observing how the artists integrated research into the artistic process, I also found that identity and voice repeatedly emerged as key themes in my data. In Chapter 5 I discussed the role of the artist, showing how Daniel and Annie had to negotiate their roles as managers, working within an institution and running a studio with workers and student volunteers.

Like other qualitative research methods, the researcher's voice is considered a powerful tool that can unconsciously manipulate the narrative in response to the researcher's personal biases and politics. This dangerous power in research is combated through peer revisions, triangulation, and other structural framework that ensures objectivity. In trying to find connections between qualitative research and practice-based research, I struggled to see how the artist's voice could be kept in check. And more importantly I asked myself should the artists' voice be limited by a similar framework?

My response is simply no. I believe the strength in practice-based research is that the artists' voice, which comes through in aesthetic, design and craft are what make that artists' work so important. Unlike other research methods, practice-based research relies on the subjectivity of the artist to show how information can be uniquely interpreted and analyzed. In *Diffuse Reflection Lab,* the artwork was intriguing because Daniel and Annie's background as architects informed the vignettes. Their construction and material decisions were based in experience, which is not replicable.

While the role of manager is becoming a more common practice in large site-specific works, I also believe this role provided an alternative voice to the work. Lead

Pencil embraced the collaboration of workers and students, which allowed new perspectives to contribute to the final work. The workers' fine arts backgrounds gave the artists an opportunity to see alternative interpretations to their work and at times the artists engaged the workers in debate over layout and aesthetic decisions. As Daniel and Annie extended collaborations to others they were able to disperse the contributing voice that shaped their work. While *Diffuse Reflection Lab* still strongly shows Lead Pencil Studio's voice, I believe their collaborative model could extend to a more democratic studio practice that creates a collective voice of many different individuals.

Architects and Practice-Based Research

In my data analysis, I extended the role of the artist to discuss how Daniel and Annie negotiated their practice between architecture and art. When I first heard Lead Pencil speak in the spring of 2012, I was particularly interested in how they prescribed order and rigor to their practice. I was so excited to work with the artists because they were articulate individuals who showed that artwork could be thought out and thorough. Once I began to further investigate Lead Pencil, I felt like much of their thought and rigor originated from their trainings as architects.

Interestingly, many discussions around practice-based research focus on academia and how artists conduct research in relation to the Masters in Fine Arts program (Daichendt, 2012; Elkins, 2009). The training in MFA programs seems to have a great influence on how artists interact with their work and whether they conduct research, but since Daniel and Annie were trained in architecture I was not sure where to place them within in this debate.

In Chapter 2, I included a chart of the creative process from *Building Knowledge in Architecture* by Richard Foque (2010) who compared the processes in scientific

research, design inquiry and artistic inquiry. Foque's definition of design inquiry describes architectural practices that conduct research. Seeing that Lead Pencil Studio stands somewhere between architecture and art, I saw Foque's chart as a perfect opportunity to see where exactly Daniel and Annie fell within those practices. In Table 9, I marked Foque's chart to show how Lead Pencil Studio conduct a unique version of practice-based research that employs both design and artistic inquiry (2010, p. 44).

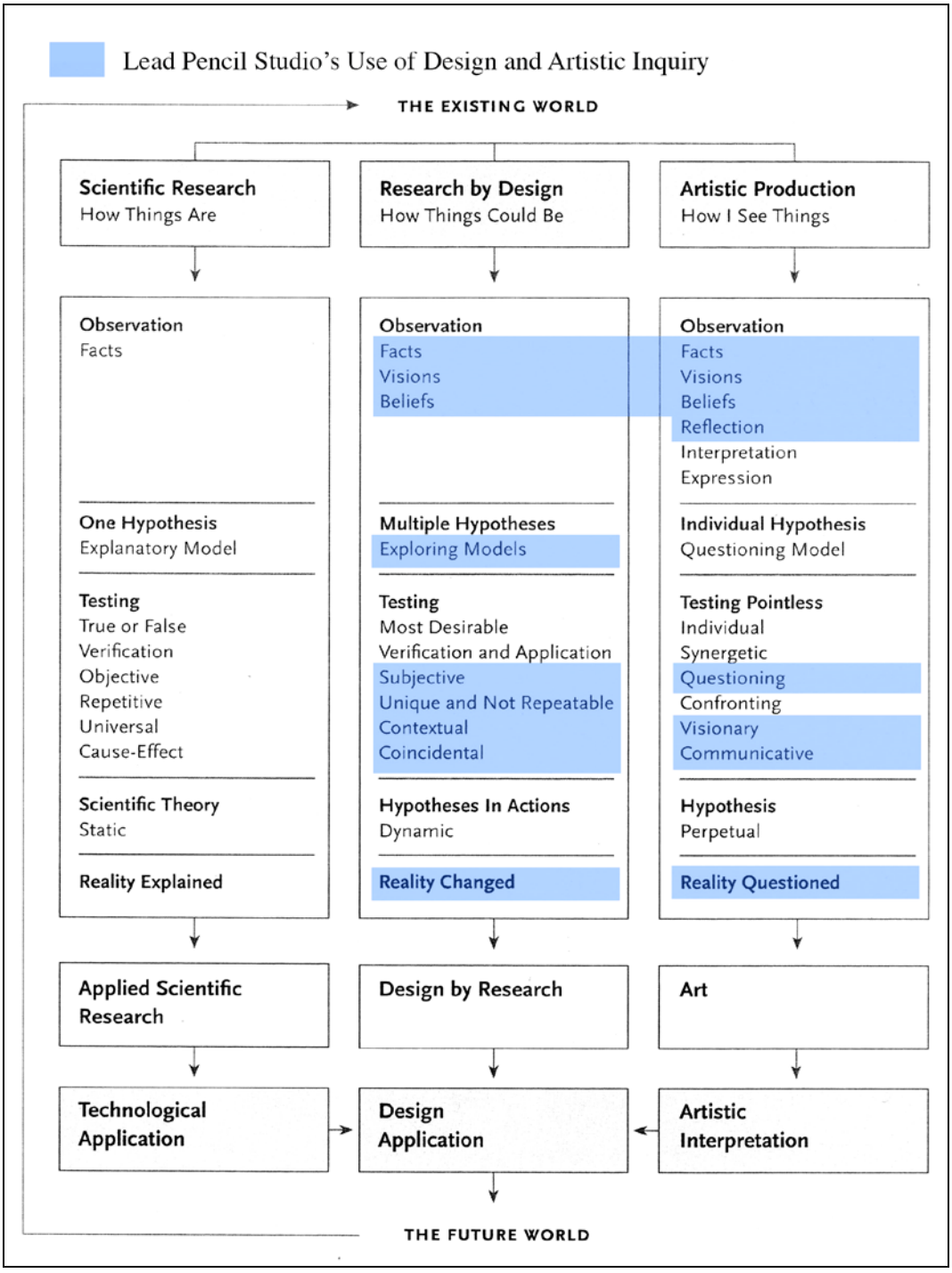


Table 9: Lead Pencil Studio's Creative Process Compared to Foque (2010)

This negotiation between design inquiry and artistic inquiry further complicates my interpretation of Lead Pencil's research, as I try to place them in a field where they are somewhat outliers. I believe their background makes them a unique example of art/research in the studio, making me wonder if their practice can be replicable. I believe their ideas and practices would be similar to artists trained in the fine arts, yet I would have to study other artists in order to confirm that belief.

Theoretical Implications

Now that I have presented the ways that Lead Pencil Studio integrated research into their artistic process while considering their distinct identity, I want to explore what these findings mean for the existent theories in practice-based research. In my hypothesis, I stated that Lead Pencil's studio practice would provide an alternative, artistic perspective to research while maintaining integrity. Now that everything is said and done, I believe that the artists employed research techniques that actually brought an alternative perspective to art practice.

I found that my data was able to provide better insight into the artistic process, showing how each step within the process required mindfulness, creativity, and rigor. Yet, when I tried to see how the artistic process contributed to the research community, I felt at a loss. In a description of the artist's research in *Artist Scholar,* Daichendt describes artists who "refer to their work as research but when asked about their data, they often provide a list of secondary sources, texts from a number of disciplines, and a host of artists and concepts" (2012, p. 12). In looking over my own data, I found that Daniel and Annie followed a similar description. Rather than present original research, the artists created vignettes that referenced already existent ideas. Lead Pencil did not

follow a clear directive that first asked a question and then answered it; rather, they tested a variety of situations or hypotheses without searching for answers.

Another conflict between Lead Pencil's practice and research was the artists' lack of a central research question. In reality, I was never sure whether the artists had one driving research question for *Diffuse Reflection Lab*, and surprisingly I never explicitly asked them. If I were to speak for Daniel and Annie, I would say their work asked – how has reflection affected our built environment? While this one question encapsulated their work, I also believe there is no clear answer. Rather, the answer occurs through interpretation, which the artists leave to the public and art critic. The artist's preference to omit analysis from their course reader further shows their resistance to find an answer through their research, which I think is a common resistance among contemporary artists.

Without a clear research question or a clear explanation of research, I have to argue that overall, Lead Pencil Studio's work does not support the claim that practice-based research can contend with other forms of qualitative research. First, if the artists are not self-identifying as researchers can we truly justify their work as legitimate? Also, while Lead Pencil's work integrated research into their practice, the final product does not compete against other research products due to its broadly subjective interpretations. At the beginning of my research, I believe I was trying to force the artist's creative process into a more academically approved category but now that I have dissected the artistic process, I believe that I have shown the merits of this practice as a separate and emergent type of art practice, which integrates qualitative research into the artist's studio practice. And as I pointed out at in my problem statement, I seem to only be adding more to the nuanced terminology surrounding arts-based research.

Ultimately, I believe that *Diffuse Reflection Lab* shows that artists can conduct research, but that their final product clearly breaks from other qualitative methods.

Rather than look to the artwork as the research product, which I believe many academics are trying to do with practice-based research, I believe the artwork can inspire future research and provide alternative views for other disciplines. This approach then lends itself to my other major question, which discusses Lead Pencil Studio and interdisciplinary learning.

Lead Pencil Studio and Interdisciplinary Learning

Diffuse Reflection Lab lends itself to interpretation from a wide variety of disciplines, including engineering, psychology, architecture or urban development. While the artists never provided a written report or thesis, their artwork elicits interpretations that can connect people to a wide variety of disciplines. As an art educator, I saw these connections as wonderful teaching opportunities.

In *Curriculum Development in the Postmodern Era*, Slattery cites Stephanie Springgay who "maintains that the role of contemporary artworks is no longer to form imaginary or utopian realities, but rather to create a way of living and autobiographical models of action" (Slattery, 2006, p. 68). The use of contemporary art in curriculum allows for students to experience an idea through the artwork, connecting their learning to experience like John Dewey advocates in *Art and Experience*.

Not only does Lead Pencil present a big idea through multiple disciplinary lenses, but their artistic process also models a way of learning. The artists' process shows how students can structure their own art/research process. Through the themes that I observed in Chapter 5, the artists modeled educational actions like: observation, contextual research, material experimentation, editing, collaboration, and presentation. While the artists' process is most replicable in the art classroom, I believe it can transfer to other disciplines in the form of arts integration.

Applications in the Art Classroom

Similar to my definition of the artistic process, *Studio Thinking: The Real Benefits of Visual Arts Education* shows how a studio art practice can organize cognition in the classroom (Hetland et al., 2007). The authors describe eight studio habits of the mind, which are also comparable to Eisner's argument about what art teaches in *The Arts and The Creation of Mind* (2002). In Table 10, I listed Hetland's studio habits, Eisner's list of what the arts teach, and the major themes from Lead Pencil Studio's studio art practice. I found that by listing them in order and side-by-side I was easily able to find similarities, which all support art's ability to teach cognitive skills that extend past the art room.

Studio Habits of the Mind	*The Arts and The Creation of Mind*	Lead Pencil Studio: Themes in Artistic Process
• Develop Craft • Engage and Persist • Envision • Express • Observe • Reflect • Stretch and Explore • Understand Art World	• Attention to Relationships • Flexibility • Using Materials as a Medium • Shaping Form to Create Expressive Content • Exercise of Imagination • Learning to Frame the World from Aesthetic Perspective • Ability to Transform Experience into Speech and Text	• Observation and Inspiration • Contextual Research through Text and Media • Experimentation with Materials and Ideas • Editing • Collaboration • Presentation in Speech and Text

Table 10: Comparison of Studio Practices in Education

I was particularly interested in the *Studio Habits of the Mind*, because the authors examined the art teacher's language in the classroom to show how these habits are

reinforced (Hetland et al., 2007). The authors describe the teachers' works and phrases like,

> . . . *decisions, planning, think about, what if, you might consider, I wonder if, experiment, it might be because, you could try (x or y or z),* and so forth, all of which are utterances intended to encourage approaching work or ideas thoughtfully. (Hetland et al., 2007, p. 17)

The authors compared these phrases to studio habits like "reflection," "envision," and "stretch and explore" (Hetland et al., 2007, p. 17). I found that this example resonated with my own observations of Lead Pencil Studio. Oftentimes, Daniel and Annie would speak with the workers, using similar phrases like, "I wonder," "it might be," or "what if." At first I overlooked these phrases because they were associated with such particular moments within the studio, but now I believe the professional artist's process can inspire and inform art teachers who are using similar language.

Applications beyond the Art Classroom

By applying Lead Pencil's studio art practice to other classrooms, I am advocating for arts integration. There is resistance to arts integration, because it can mislead educators and highlight the "secondary, utilitarian value" of the arts rather than allowing the arts to stand on their own (Hetland et al., 2007, p. 3). I believe the strongest trait of art/research, which can support art as a leader in arts integration is process. Lead Pencil's art/research exemplifies a framework that centers on process, which I believe can then transfer to other disciplines without weakening the arts. Since curriculum has focused more on the outcomes of learning rather than the course content themselves, I believe the artistic process can reorient the curriculum towards process and not merely product (Slattery, 2006).

Rather than viewing arts integration as a decorative addition, a view that weakens the arts, I believe the process in art/research can provide framework for other disciplines. The authors of *Studio Thinking* similarly advocate for the arts as a framework when they write, "Indeed, the Studio Structures should support constructivist teaching in any discipline in which instruction keeps disciplinary work at the center of the students' learning activities" (Hetland et al., 2007, p. 110). By using the themes developed in the studio, narrative and experience become tools in art/research, which the students can then use as tools in other disciplinary pursuits.

Collaboration: A Transdisciplinary Model

Regardless of which discipline adopts the art/research process, the artists' modeling of collaboration transcends lessons, becoming transdisciplinary. Dewey emphasizes the "importance of creating communities of learners so that children could learn from each other" (Eisner, 2002, p. 94). While initial assumptions about the art studio, romanticizes it as an isolated experience, I believe artists in general can actually model a community of learners (Jones, 1996). Both art and education must fight the notion of individualism as the best practice, and I believe my case study of Lead Pencil Studio helps model a new type of art practice that might discourage some individuals. Rather, I believe the role of artist manager can be transferred to the classroom where the artist manager is the artist teacher. By working alongside the workers in the studio, Lead Pencil Studio was able to create a product that was a shared goal amongst everyone who entered the space. I believe this artists' model of collaboration emphasizes listening, reflection and respect. It also places the teacher not only as a motivator but also as a learner in a community, where the teacher intends to explore an idea or experience alongside his/her students.

Implications for Future Research

An Unexpected Rabbit Hole: Art Criticism

The current literature in practice-based research has academics explaining the artist's research in practice-based research even though the work comes from a professional artist (Daichendt, 2012; Desai et al., 2010; Sullivan, 1996; Sullivan, 2005). While my thesis resembles this literature, I am interested in how artists display their research without the influence of academics. After reflecting on my time with Daniel and Annie, I asked – if Lead Pencil Studio does not identify their practice as part of the art/research continuum, is it my role to place them within it? For future research, I would be interested in observing artists, who on their own volition are writing/analyzing their research alongside their artwork.

The role of writing took a prominent role in my research, which led me on a tangent towards the role of criticism. Beyond researching artists who self-identify their work as research, I would also be interested to see how art criticism interacts with that type of work and whether it is vital to the artist's work. I often wondered whether artists have begun to write about their work because the art critic no longer satisfies that need, or whether the art critic's demise is due to the increase of self-critique via writing from artists.

Gender Roles in Studio Art Practice

Another topic that arose from my observations, which I did not fully pursue, was the breakdown of gender roles within the studio. I found that Daniel and Annie, while working as equals in a collaborative, oftentimes divided their labor in ways that played into gender stereotypes. Daniel took part in the construction process whenever workers had construction questions they would immediately go to him. Meanwhile, Annie

directed the student volunteers, who were more often female. Her manual tasks in the studio were oriented more towards painting and organizing the space. Having experienced a similar gender divide in my own art education (the men were sculptors and the women were painters), I would be curious to see how pervasive gender roles are in determining an artist's medium. I also wonder if I had interviewed the artists separately whether those gender differences would have become more apparent and whether research on artist couples would further reveal gender divides in the art process.

MFA or PH.D.

During my research, I signed up for an email subscription with Art & Education newsletters. For months these emails have overwhelmed my inbox on a daily basis, but I find them valuable to my research because of how often they advertise programs that teach research in art. Through these emails I learned about Ph.D. programs, which are becoming increasingly common in Europe, Australia and Canada. Descriptions of masters programs seek to,

> . . . extend students' ability to gather relevant material, to undertake close reading, listening and looking, to locate and understand connections within and across material and to make informed judgments about the value and relevance of ideas from sources external to their practice. (personal communication, April 11, 2013)

These programs are further discussed in *Ph.D. for Artists* by Elkins (2009). Since I studied artists who did not go through this type of training, I am interested in how research conducted by artists in these Ph.D. and MFA programs compare.

Practice-based Research in the Classroom

Finally, while I suggested how Lead Pencil Studio's model of art/research could be extended to the classroom, I would be interested to see an application. Through a case

study that uses practice-based research in the classroom, I believe art/research could become better established within the arts integration/interdisciplinary learning debate.

Final Thoughts

In Chapter 2, I began my investigation of art and research by citing the National Academy of Science and their proclamation that art-based research was a soft form of qualitative research. When I began my thesis, I wanted to prove that statement wrong. Based on my own experiences in high school and college, I wanted to prove art's rigor and its strengths when compared to other forms of qualitative research. But in being part of the professional artist's art/research process, I found rigor and drive that was unique to art. Instead of arguing for acknowledgment from the National Academy of Science or any other research community, I came to see the value in the artist's research practice in its own right. By trying to fight for a position that is equivalent to other qualitative methods, we would have to change artistic inquiry and the creative process. I do not believe in changing art to better fit the research process, ultimately I believe that art/research provides a valuable model of artistic practice that artists and educators can learn from.

Working with Lead Pencil Studio inspired me as an artist and an educator, and I hope to incorporate their art/research into my classroom to show my students the possibilities within collaboration and artistic inquiry. The artists also showed me that even within a unique project, we should look at our work as a life-long pursuit, recognizing that observations and inspiration can inform us for years to come. I hope that my study extends beyond my own practice and shows others the possibility that art has within not one lesson, but a life-long process of raising questions.

Appendix A: Consent Form

PARTICIPANT CONSENT FORM

IRB USE ONLY
Study Number:
Approval Date:
Expires:

Title: The Artist as Researcher: A Narrative Case Study of the Lead Pencil Studio
Conducted By: Erica Palmiter
Sponsor: Dr. Christina Bain

The purpose of this form is to provide you information that may affect your decision as to whether or not to participate in this research study. The person performing the research will answer any of your questions. Read the information below and ask any questions you might have before deciding whether or not to take part. If you decide to be involved in this study, this form will be used to record your consent.

Purpose of the Study

You have been asked to participate in a research study about practice-based research and its contribution to interdisciplinary learning. The purpose of this study is to conduct a narrative case study of the Lead Pencil Studio. Data will be gathered to answer how contemporary artists conduct research in their studio practice and whether their research/practice contributes to interdisciplinary learning.

If you agree to be in this study, you will be asked to:

- Consent to a studio visit in Seattle where the researcher will conduct a semi-structured interview and observations (including taking photos of the space, as allowed by the artists).
- Consent to regular observations done by the researcher, Erica Palmiter, while working at the University of Texas Austin.
- Allow the researcher to document visual sources such as: photos of the artwork, photos of the working studio/gallery space and working sketches (the artists can allow documentation on a case-by-case basis).
- Conduct at least three short interviews (group or individual) with the researcher as supplement to her observations.
- Review any literature written about your participation, to ensure validity.
- Consent that your participation be audio/video recorded.

Total estimated time to participate:

This study will last for the duration of the artists' residency at the University of Texas, Austin. The hours of participation will vary on a day-to-day basis, depending on the artists' hours spent in the studio/building. The interviews will last at least half an hour but no more than an hour, depending on what questions arise during observations and what the artists choose to discuss.

Risks

There are no foreseeable risks to participating in this study.

Benefits

You will receive no direct benefit from participating in this study; however, the research of practice-based research will further contribute in support of this methodology, which is a topic currently under debate in higher education. The research will also contribute to the study of interdisciplinary learning in art education.

Compensation

You will not receive any type of payment participating in this study.

Confidentiality and Privacy Protections:

If you choose to participate in this study, you will be audio and/or video recorded. Any audio and/or video recordings will be stored securely and only the research team will have access to the recordings. The data resulting from your participation may be used for future research or be made available to other researchers for research purposes not detailed within this consent form.

Contacts and Questions about the study:

Prior, during or after your participation you can contact the researcher Erica Palmiter via phone or email.

Contacts and Questions concerning your rights as a research participant:

For questions about your rights or any dissatisfaction with any part of this study, you can contact, anonymously if you wish, the Institutional Review Board by phone at (512) 471-8871 or email at orsc@uts.cc.utexas.edu.

Participation

Your participation is voluntary. You may decide not to participate at all or, if you start the study, you may withdraw at any time. Withdrawal or refusing to participate will not affect your relationship with The University of Texas at Austin in anyway.

If you agree to participate please sign the forms and return a hard copy to Erica Palmiter or via email at epalmiter@gmail.com. You will receive a copy of this form.

Signature

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By signing this form, you are not waiving any of your legal rights.

_____ I agree to be **audio and/or video** recorded.
_____ I do not want to be **audio and/or video** recorded.

_____
Printed Name

_____ _____
Signature Date

As a representative of this study, I have explained the purpose, procedures, benefits, and the risks involved in this research study.

_____
Print Name of Person obtaining consent

_____ _____
Signature of Person obtaining consent Date

Appendix B: Sample Interview Questions

Planning Stage Interview

1. How and when did you start working together?
2. How would you define your process?
3. Do you think that criticism helps you further articulate your process?
4. Do you think it is important for the artist to write about their work?
5. When did you first become interested in reflections and how did you end up at the point you are right now?
6. From the moment you developed your idea and sent your proposal what kind of research have you done to prepare?

Execution Stage Interview

1. How does this experience working with others compare to projects you have done in the past?
2. How would you identify with the label of being an artist manager?
3. Can you talk about any instances where the worker's different perspectives have allowed you to see things differently on-site?
4. How does your work as a collaborative affect how you collaborate with others?
5. How do you get distance from your work while you're in the midst of everything?
6. Do you think you're conducting research while in the midst of your process?

Presentation Stage Interview

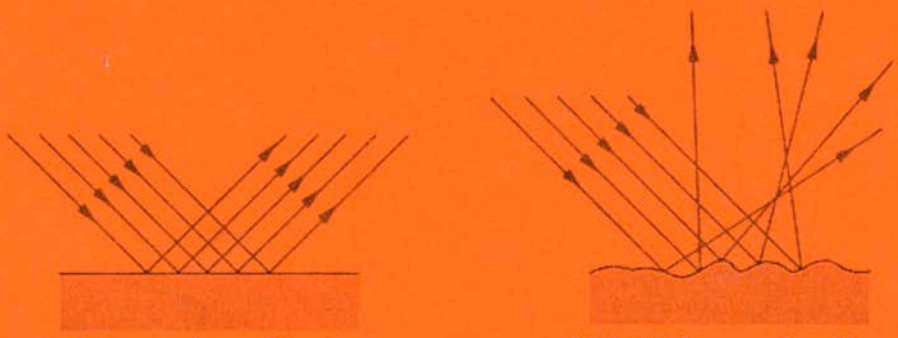
1. What was the main form of documentation for this work?
2. How did you feel about the course reader as part of this work and do you think you will discuss it in future presentations?
3. Did you ever consider adding your own writing to the course reader?
4. How do you balance either going in great detail about the work or holding back and hoping people will make their own connections?
5. Does your presentation philosophy change depending on the audience?
6. Are there any major things you learned from this project that you want to continue in your future work?
7. Do you ever think about how people are interacting with the work after you left the space? Would want to see this more?
8. How do you feel like research played a role throughout the creation of this piece, especially towards the end?
9. Is it common for you to create narratives that describe your research? And how do you decide which narratives make the cut?
10. Do you feel like you completed this piece?

Appendix C: Excerpts from *Diffuse Reflection Lab* Course Reader

LEAD PENCIL STUDIO

DIFFUSE REFLECTION LAB

The Department of Art and Art History | Visual Arts Center | Vaulted Gallery



(*a*) Specular reflection

(*b*) Diffuse reflection

Published on the occasion of the Vaulted Gallery exhibition of
Diffuse Reflection Lab February 1 - May 11, 2013

THE UNIVERSITY OF TEXAS AT AUSTIN COLLEGE OF FINE ARTS

Department of Art + Art History

VISUAL ARTS CENTER

LEAD PENCIL STUDIO

INTRO TO THE DIFFUSE REFLECTION LAB READER

LEAD PENCIL STUDIO: ANNIE HAN & DANIEL MIHALYO

UNIVERSITY OF TEXAS - AUSTIN
VISUAL ART CENTER

ABSTRACT/OVERVIEW:

The UT Austin student seminar that underpinned the research leading up to this exhibition never took place due to scholastic schedule conflicts. Nevertheless, several individuals involved in the development of the exhibition decided that a reader for the non-occurring seminar should be generated as a supplement to the visual component of the exhibition.

This reader is therefore intended to give the art viewing public and students of art, art history, art education and architecture a general introduction to the basic concepts behind reflection as they occur in the social and constructed environments we experience. While there has long been a black hole of scholarship on the subject of *mirrors*, this oversight has recently been substantially narrowed by three books and a dissertation completed only during the last decade. The subject of diffuse reflection and the related increase in glossy surfaces remains an elusive phenomenon in contemporary scholarship. In keeping with the title of the non-occurring seminar and exhibition title, the laboratory on reflection has been diffuse and, as such, the content of the reader has been expanded to also include the subject of specular reflection (mirrors). Other fiction, prose and student contributions on the subject have also been included to further diffuse the otherwise highly narrow topic of study.

At any rate, with so much recently written about mirrors, it seemed that much of it could apply to the subject at hand. Reading these texts will provide an excellent entry point to the many themes and sub-currents which are visually explored in the accompanying installation at the VAC Vaulted Art Gallery.

The artists wish to thank the many talented and willing volunteers who contributed hours, labor and thought toward this monumental construction in addition to normal coursework during the 2013 school year.

For the development of this reader, the artists are also keen to highlight the particular efforts of Curator Jade Walker and art education students Emily Kelly and Erica Palmiter who contributed greatly toward its completion.

EXHIBITION READER
Diffuse Reflection Lab: UT Austin VAC Findings 2013

INDEX

Published Works:

Reader Submissions - January 2013:

Collaboration as Reflection

Erica Palmiter

Art educator, Erica Palmiter, reflects on her research of the Lead Pencil Studio as they complete their Artist-in-Residence this spring at the Visual Arts Center. She examines the artists' work as it intersects with her own narrative as an educator.

For the past several summers I have taught a six-week studio art class to around twenty seventeen-year-olds. My main objective has been to bring them into an appreciation of contemporary art through collaborative projects. Most of these students come from public schools where the art curriculum is dominated by the element and principles of design, meaning the students have perfected the graphite drawing of a still life, but their technical proficiency lacks depth. They invariably work on their school assignments alone, with no conversation or critique to draw them out.

On the first day of the summer class, I assign my students a group project, and there is always a lot of resistance. In that first week no one knows each other's name, the space is foreign, and the project seems implausible. In those first encounters I observe the students, identifying the alpha female who is never wrong, the silent solo type who shrinks into a corner, and the boyish flirt who happily goes along. Then I observe what becomes an ongoing struggle within the group, although at some point a working equilibrium coalesces and the group develops a unique personality.

This past month, I joined the Lead Pencil Studio as a researcher. My graduate thesis explores how artists conduct research in their studio process. I am examining the work of the two artists that comprise the Lead Pencil Studio, Daniel Mihalyo and Annie Han, as a case study. As I have observed them, my focus has evolved and I am now equally interested in how their collaboration affects their work. The artists represent a special example of a collaborative partnership. And with every large-scale installation that they create, they rely on a group of volunteers and workers for a short-term collaboration.

For the project they are currently working on, *Diffuse Reflection Lab* has a core set of artists and architects working with a handful of transient student volunteers. Lead Pencil has assumed a managerial role while still working alongside everyone else. The artist as manager is not new to art; the artist's role of leading a group of artists dates back to Renaissance studios and regained strength in the1960's, as in Andy Warhol's Factory. While Annie and Daniel move from project to project, the working relationship between them is constant, yet they also must adjust to each site as they collaborate with a new set of artists and workers.

I was initially attracted to Annie and Daniel's work, because of their proposal presentation at The University of Texas Austin in the spring of 2012. Generally at artist talks, I am used to hearing a one-track monologue. The artist delivers a speech about his or her artwork to a passive audience, waiting until the end for questions. But the Lead Pencil Studio's presentation was a conversation. Annie and Daniel seamlessly spoke back and forth, at times turning to the other to ask a question or offer an additional comment. The audience had a chance to observe their artistic collaboration in action.

Now as I sit in the corner of the gallery studio space, a Seattle-based radio station blares music, a table saw squeals in the courtyard, and a worker abruptly begins to sing with the music in his headphones. The space is cacophonous and truly disorienting to an outsider, although in reality it is highly structured. My observations focus on Daniel and Annie who find each other amidst their separate tasks, to pause and stand in front of the structure. They stand close together quietly listing the tasks ahead of them and discussing the status of the work in progress. I have watched them work in this din where their conversation is nothing above a muttered whisper and their language is reduced to short yet meaningful exchanges. At one point I noticed that a glance was sometimes enough. This level of communication is a skill and was not developed overnight. The artists have been working and living together for years and I believe their intimate understanding is common in many long-term partnerships. Daniel and Annie have learned how to reflect upon the other's aesthetic and ideas, to then create a jointly understood image.

Even more interesting, I have observed how the rest of the team has adjusted to the Lead Pencil's working style. With every semester, the VAC encounters a new artist, a new vision and a new approach to working. Strangely the artists' mode of communication and their calm, collected presence has permeated the atmosphere of the gallery space. Past the music and machinery noises, the workers have mirrored Annie and Daniel's attitude. With so many discrete and menial tasks I believe it would be easy for workers to lose sight of the overall project, but somehow they embody the attitude of the artists and are able to represent the work's big idea, which is "Reflection."

Thinking of this experience as an educator, I see that collaboration takes on many forms. I believe the solitary artist is diminishing replaced by the collaborative artistic/working group. Whether it lasts through a school project or spans over multiple years, reflection is a constant part of the process. My students, just like Lead Pencil, allow their personalities, aesthetics and artistic vision, to determine a new group personality, which can permeate the process and ultimately the art piece.

As an art teacher, I often wonder how much my own idiosyncrasies determine the personality of the space. If I were to embody the cool and collected leader of the studio, would the students soon follow suit? Could my attitude affect the group as instantaneously or seamlessly as it has occurred with the Lead Pencil Studio? Reflecting on my own interaction with artists, I know we have all been one of the characters I observe among my seventeen-year-old students. The challenge is to identify the traits of our own practice, find someone with whom to enter a dialogue, and ultimately achieve a balance in that reflection.

Appendix D: Photo Courtesies

Figure 1: Courtesy of Visual Arts Center, The University of Texas at Austin

Figure 2: Courtesy of Visual Arts Center, The University of Texas at Austin

Figure 3: Courtesy of Lawrimore Project in Seattle, WA

Figure 4: Courtesy of Lawrimore Project in Seattle, WA

Figure 5: Courtesy of *Dwell Magazine,* Photograph by Philip Newton

Figure 6: Courtesy of The National Endowment of the Arts

Figure 7: Courtesy of Lawrimore Project in Seattle, WA

Figure 8: Courtesy of Suyama Space in Seattle, WA

Figure 9: Courtesy of Lawrimore Project in Seattle, WA

Figure 10: Courtesy of The National Endowment of the Arts

Figure 11: Courtesy of Lawrimore Project in Seattle, WA

Figure 12: Courtesy of The Architectural League's Urban Omnibus

Figure 13: Courtesy of The Architectural League's Urban Omnibus

Figure 14: Courtesy of The Architectural League's Urban Omnibus

Figure 15: Courtesy of MassArt Bakalar & Paine Galleries, Boston, MA

Figure 16: Courtesy of Visual Arts Center, The University of Texas at Austin

Figure 17: Taken by Erica Palmiter

Figure 18: Taken by Erica Palmiter

Figure 19: Movie Still from Brent Bayless (creator), Comissioned by Visual Arts Center, The University of Texas at Austin

Figure 20: Movie Still from Brent Bayless (creator), Comissioned by Visual Arts Center, The University of Texas at Austin

Figure 21: Courtesy of Visual Arts Center, The University of Texas at Austin

Figure 22: Taken by Erica Palmiter

Figure 23: Movie Still from Brent Bayless (creator), Comissioned by Visual Arts Center, The University of Texas at Austin

Figure 24: Taken by Erica Palmiter

Figure 25: Taken by Erica Palmiter

Figure 26: Taken by Erica Palmiter

Figure 27: Taken by Erica Palmiter

Figure 28: Movie Still from Brent Bayless (creator), Comissioned by Visual Arts Center, The University of Texas at Austin

Figure 29: Movie Still from Brent Bayless (creator), Comissioned by Visual Arts Center, The University of Texas at Austin

Figure 30: Taken by Erica Palmiter

Figure 31: Movie Still from Brent Bayless (creator), Comissioned by Visual Arts Center, The University of Texas at Austin

Figure 32: Movie Still from Brent Bayless (creator), Comissioned by Visual Arts Center, The University of Texas at Austin

Figure 33: Courtesy of Lead Pencil Studio

Figure 34: Courtesy of Lead Pencil Studio

Figure 35: Movie Still from Brent Bayless (creator), Comissioned by Visual Arts Center, The University of Texas at Austin

Figure 36: Movie Still from Brent Bayless (creator), Comissioned by Visual Arts Center, The University of Texas at Austin

Figure 37: Courtesy of Lead Pencil Studio

Figure 38: Taken by Erica Palmiter

Figure 39: Courtesy of ARTstor, data from University of California San Diego

Figure 40: Courtesy of ARTstor, photograph by Ralph Lieberman

Figure 41: Taken by Erica Palmiter

Figure 42: Courtesy of Lead Pencil Studio

Figure 43: Courtesy of Lead Pencil Studio

Figure 44: Movie Still from Brent Bayless (creator), Comissioned by Visual Arts Center, The University of Texas at Austin

Figure 45: Movie Still from Brent Bayless (creator), Comissioned by Visual Arts Center, The University of Texas at Austin

Figure 46: Taken by Erica Palmiter

Figure 47: Courtesy of Lead Pencil Studio

Figure 48: Movie Still from Brent Bayless (creator), Comissioned by Visual Arts Center, The University of Texas at Austin

Figure 49: Movie Still from Brent Bayless (creator), Comissioned by Visual Arts Center, The University of Texas at Austin

Figure 50: Movie Still from Brent Bayless (creator), Comissioned by Visual Arts Center, The University of Texas at Austin

Figure 51: Taken by Erica Palmiter

Figure 52: Taken by Erica Palmiter

Figure 53: Taken by Erica Palmiter

References

Amos, H. J. (2002). *Doing qualitative research in education settings*. Albany, NY: State University of New York Press.

Applebee, A. N., Adler, M., & Flihan, S. (2007, December). Interdisciplinary curricula in middle and high school classrooms: Case studies of approaches to curriculum and instruction. *American Educational Research Journal, 44*(4), 1002-1039.

Baker, G., Krauss, R., Buchloh, B., Fraser, A., Joselit, D., Meyer, J., . . . Storr, R. (2002, Spring). Round table: The present conditions of art criticism. *October, 100,* 200-228.

Beete, P. (2011). Lead Pencil Studio and the spaces within. *NEA Arts, 1*, 6-9, 22.

Boston, B. O. (1996). *Connections: The arts and the integration of the high school curriculum.* New York, NY: College Board & Getty Center for Education in the Arts.

Burton, J., Horowitz, R. & Abeles, H. (1999). Learning in and through the arts: Curriculum implications. In E. Fiske (Ed.), *Champions of change: The impact of the arts on learning* (pp. 35-46). Washington, DC: Arts Education Partnership and President's Committee on the Arts and Humanities.

Cahnmann-Taylor, M. (2008). Arts-based research: Histories and new directions. In M. Cahnmann-Taylor & R. Siegesmund (Eds.), *Arts-based research in education: Foundations for practice* (pp. 3-15). New York, NY: Routledge.

Cahnmann-Taylor, M. & Siegesmund, R. (Eds.). (2008). *Arts-based research in education: Foundations for practice.* New York, NY: Routledge.

Clandinin, D. J. & Connelly, F. M. (2000). *Narrative inquiry: Experience and story in qualitative research*. San Francisco, CA: Jossey-Bass Publishers.

Daichendt, J. G. (2012). *Artist scholar: Reflections on writing and research*. Bristol, UK: Intellect Books.

Danvers, J. (2006). The knowing body: Art as an integrative system of knowledge. In T. Hardy (Ed.). *Art education in a postmodern world: Collected essays* (pp. 77-90). Bristol, UK: Intellect Books.

Desai, D. (2002, Summer). The ethnographic move in contemporary art: What does it mean for art education?. *Studies in Art Education, 43*(4), 307-323.

Desai, D & Hamlin, J. (2010). Artists in the realm of historical methods: The sound, smell, and taste of history. In D. Desai, J. Hamlin, & R. Mattson (Eds.), *History as art, art as history: Contemporary art and social studies education* (pp. 47-66). New York, NY: Routledge.

Desai, D., Hamlin, J., & Mattson, R. (2010). Introduction. In D. Desai, J. Hamlin, & R. Mattson (Eds.), *History as art, art as history: Contemporary art and social studies education* (pp. 3-14). New York, NY: Routledge.

Efland, A. D., Freedman, K., & Stuhr, P. (1996). *Postmodern art education: An approach to curriculum*. Reston, VA: National Art Education Association.

Eisner, E. (2002). *The arts and the creation of mind.* New Haven, CT: Yale University Press.

Eisner, E. (2008). Persistent tensions in arts-based research. In M. Cahnmann-Taylor & R. Siegesmund (Eds.), *Arts-based research in education: Foundations for practice* (pp. 16-27). New York, NY: Routledge.

Elkins, J. (Ed.). (2009). *Artists with Ph.D.s: On the new doctoral degree in studio art.* Washington, DC: New Academia Publishing.

Fontana, A. & Frey, J. H. (1994). Interviewing: The art of science. In N. K. Denzin and Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 361-376). Thousand Oaks, CA: Sage Publications.

Foque, R. (2010). *Building knowledge in architecture*. Antwerp, Belgium: University Press Antwerp.

Gardner, H. (1982). *Art, mind, and brain: A cognitive approach to creativity*. New York, NY: Basic Books.

Gaztambide-Fernandez, R.A. (2008). The artist in society: Understandings, expectations, and curriculum implications. *Curriculum Inquiry, 38(3),* 233-265.

Graves, J. (2006 December/2007 January). Castle nowhere. *The Believer*, *4*(10), 43-38.

Graves, J. (2007, May 10). The Dreams of Architects: After emerging is done, incremental work begins for the Lead Pencil Studio. *The Stranger.* Retrieved from http://www.thestranger.com/seattle/the-dreams-of-architects/Content?oid=219284

Graves, J. (2009, May 14). Lead Pencil Studio: Retail/Commercial at Rainer Square. *Modern Painters*. Retrieved from http://www.artinfo.com/news/story/31123/lead-pencil-studio

Greenberg, R. (2005, March). Successfully artful integrations: Lead Pencil Studio. *Architectural Record*. Retrieved from http://archrecord.construction.com/archrecord2/design/0503/LPS.asp

Hall, E. (2004, March-April). Reviews: Lead Pencil Studio. *The Organ.* Retrieved from http://www.suyamaspace.org/assets/uploads/installations/press_leadpencilstudio_theorgan_0304-0404.pdf

Hancock, D. R. & Algozzine, B. (2006). *Doing case study research: A practical guide for beginning researchers*. New York, NY: Teachers College.

Hanrahan, S. (2000). An exploration of how objectivity is practiced in art. *Leonardo, 33*(4), 267-274.

Hetland, L., Winner, E., Veenema, S., & Sheridan, K. M. (2007). *Studio thinking: The real benefits of visual arts education.* New York, NY: Teachers College.

Holstein, A. (2004, March). Brand-new secondhand. *Dwell*. Retrieved from http://www.dwell.com/green/article/brand-new-secondhand

Howard, T. J., Culley, S. J., & Dekoninck, E. (2008, March). Describing the creative design process by the integration of engineering design and cognitive psychology literature. *Design Studies, 29*(2), 160-180.

Johnson, R. (2007, Spring). Annie Han & Daniel Mihalyo: Making history by combining art and architecture. *University of Oregon AA&A Review, 25*(1), 20. Retrieved from http://aaa.uoregon.edu/sites/aaa.uoregon.edu/files/docs/news/aaa_review_spring07.pdf

Jones, C. A. (1996). *Machine in the studio: Constructing the postwar American artist.* Chicago, IL: The University of Chicago Press.

Krug, D. H., & Cohen-Evron, N. (2000, Summer). Curriculum integration positions and practices in art education. *Studies in Art Education, 41*(3), 258-275.

Leavy, P. (2009). *Method meets art: Arts-based research practice.* New York, NY: Guilford Press.

Marshall, J. (2005, Spring). Connecting art, learning, and creativity: A case for curriculum integration. *Studies in Art Education, 46(3),* 227-241.

Marshall, J. & D'Adamo, K. (2011, September). Art practice as research in the classroom. *Art Education, 64*(5), 12-18.

MassArt Bakalar & Paine Galleries. (2012, Spring). *Information Packet: Spring Semester Exhibitions at the Bakalar and Paine Galleries.* Boston, MA: no author.

Mattson, R. (2010). Using visual methods in the K-12 classroom: Tactical heuristics. In D. Desai, J. Hamlin, & R. Mattson (Eds.), *History as art, art as history: Contemporary art and social studies education* (pp. 15-33). New York, NY: Routledge.

Mishook, J. J. & Kornhaber, M. L. (2006). Arts integration in an era of accountability. *Arts Education Policy Review, 107*(4), 3-11.

Molesworth, H. (2003). *Work ethic*. University Park, PA: The Pennsylvania University Press.

Moss, B. (1992). Ethnography and composition: Studying language at home. In G. Kirsch & P. A. Sullivan (Eds.), *Methods and methodology in composition research* (pp. 153-171). Carbondale, IL: Southern Illinois University Press.

Mudede, C. (2005, September 1-7). Social work: The art of disruption. *The Stranger*. Retrieved from http://www.thestranger.com/seattle/social-work/Content?oid=22804

Newkirk, T. (1992). The narrative roots of case study. In G. Kirsch & P. A. Sullivan (Eds.), *Methods and methodology in composition research* (pp. 130-152). Carbondale, IL: Southern Illinois University Press.

Parsons, M. J. (1998, Winter). Integrated curriculum and our paradigm of cognition in the arts. *Studies in Art Education, 39*(2), 103-116.

Pinnegar, S. & Daynes, J. G. (2007). Locating narrative inquiry historically: Thematics in the turn to narrative. In D. J. Clandinin (Ed.), *Handbook of narrative inquiry: Mapping a methodology* (pp. 3-34). Thousand Oaks, CA: Sage Publications.

Relyea, L. (2013). After criticism. In A. Dumbadze & S. Hudson (Eds.). *Contemporary art: 1989 to the present* (pp. 357-366). West Sussex, UK: Wiley-Blackwell.

Ribas, J. (2013). Judgement's troubled objects. In A. Dumbadze & S. Hudson (Eds.). *Contemporary art: 1989 to the present* (pp. 333-345). West Sussex, UK: Wiley-Blackwell.

Rich, S. (2006, September/October). Running on empty. *I.D. Magazine*, 66-68.

Seidman, I. (1998). *Interviewing as qualitative research: A guide for researches in education and social sciences (2nd edition).* New York, NY: Teachers College Press.

Slattery, P. (2006). *Curriculum development in the postmodern era (2nd edition).* New York, NY: Routledge.

Smith, H. & Dean, R. T. (2009). Introduction: Practice-led research, research-led practice – Towards the interactive cyclic web. In H. Smith & R. T. Dean (Eds.). *Practice-led research, research-led practice in the creative arts* (pp. 1-38). Edinburgh, UK: Edinburgh University Press.

Springgay, S., Irwin, R. L., & Kind, S. W. (2005). A/r/tography as living inquiry through art and text. *Qualitative Inquiry, 11*(6), 897-912.

Stake, R. E. (1998). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry* (pp. 86-109). Thousand Oaks, CA: Sage Publications.

Sullivan, G. (1996, Summer). Critical interpretive inquiry: A qualitative study of five contemporary artists' ways of seeing. *Studies in Art Education, 37*(4), 210-225.

Sullivan, G. (2001). Artistic thinking as transcognitive practice: A reconciliation of the process-product dichotomy. *Visual Arts Research, 27*(1), 2-12.

Sullivan, G. (2005). *Art practice as research: Inquiry in the visual arts*. Thousand Oaks, CA: Sage.

Sullivan, G. (2006, Fall). Research acts in art practice. *Studies in Art Education*, 48(1), 19-35.

Thomas, R., & Arnold, A. (2011, Summer). The A+ schools: A new look at curriculum integration. *Visual Arts Research, 37*(1), 96-104.

Visual Arts Center (2013). *Diffuse Reflection Lab.* Austin, TX: Lead Pencil Studio.

Weisberg, R. W. (1993). *Creativity: Beyond the myth of genius.* New York, NY: W. H. Freeman and Company.

Vita

Erica Palmiter Erica Palmiter was raised in Winston-Salem, North Carolina where she attended Mount Tabor High School. The summer of 2004, she attended the North Carolina Governor's School in Art. The six-week art-intensive program encouraged Erica to explore and play in the art studio without the stress of deadlines or grading rubrics. Governor's School exposed her to an alternative approach to education, which she strove to recreate in her college experience at Brown University. In Erica's senior year of college, she was an art mentor at New Urban Arts, a nationally recognized non-profit in Providence, RI. Through her meaningful relationships with students and fellow mentors, Erica became interested in art education as a life-long pursuit. Erica graduated from Brown in 2009 with a B.A. (honors) in Visual Arts.

After graduating, Erica was a Fulbright Scholar working at the secondary level as an English Teaching Assistant in Madrid, Spain. In 2011, Erica enrolled at The University of Texas at Austin where she received her Masters in Arts, with a focus in Art Education. Over the last two summers she has worked as the lead art teacher at the NC Governor's School, where she once was an art student. Erica plans to continue teaching in non-traditional art spaces and hopes to continue her education by pursuing a Masters in Fine Arts degree (so she can conduct her own art/research).

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This thesis was typed by Erica Palmiter.